

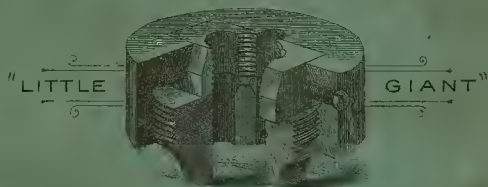
PRICE LIST
OF

TOOLS AND MACHINERY

MANUFACTURED BY

WELLS BROS. & CO.

GREENFIELD, MASS. U.S.A.



FOR
MACHINISTS, BLACKSMITHS,

AND

CARRIAGE MAKERS

USE.

FOR TABLE OF CONTENTS SEE PAGE 16

CATALOGUE AND PRICE LIST

.. OF ..

Wells Brothers & Co.

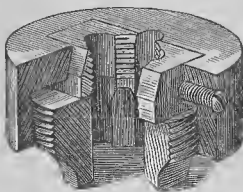
MANUFACTURERS OF

SCREW-CUTTING TOOLS

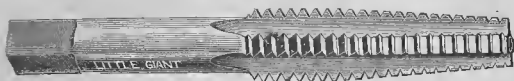
AND

MACHINERY.

"LITTLE



GIANT."



1895 B.

INTRODUCTION.

IN MAKING up this catalogue, it has not seemed necessary to us that a full and lengthy description of each individual tool and machine, or the usual amount of self praise is needed; we assume that our reputation as manufacturers of

Screw-cutting Tools and Machines

is well and favorably known to the persons into whose hands this catalogue may come.

We challenge comparison with the **best** products of any builders of similar tools and machines.

The last year has been a rich one in the product of new and improved tools, and the succeeding pages will reveal these to the careful reader. We have at least kept abreast of the times, and believe we have the largest list of improved labor-saving tools and machines of any manufacturer.

The end is not yet, for we still hope for further development in everything pertaining to this class of tools and machines, and we assure all users that we shall at once submit such developments and improvements to them for their judgment.

The name "Little Giant" has become almost a household word to those who are in any way interested in the use of this class of tools.

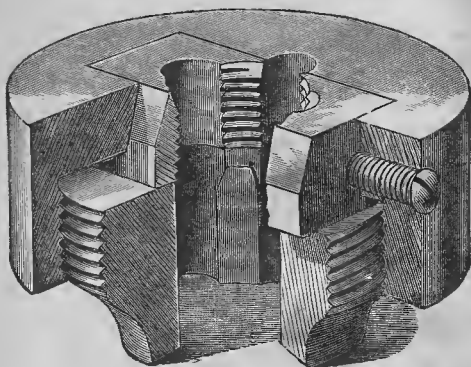
It is, therefore, a pleasant duty to extend to our customers our thanks for their patronage in the past, and we hope that we may merit a continuance in the future.

WELLS BROS. & CO.

Jan. 1, 1895.

LITTLE GIANT SCREW PLATES.

ADJUSTABLE DIE.

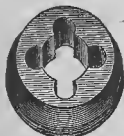


Patented February 3, 1885.

Sectional View of Die and Collet.

EXPLANATION OF THE LITTLE GIANT DIE.

The collet, or holder, is made of two pieces, called a cap and a guide. The cap has a bevel slot into which the bevel of die is fitted. The guide is screwed into the cap, which throws the die into the bevel of the collet, and into line. To adjust, simply turn the screws at ends of dies in or out, as the adjustment desired requires.



GUIDE



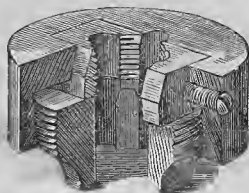
DIE



Our claim for this adjustable die is its solidity; the impossibility of stripping of threads; its perfect adjustment; its simplicity, durability and strength; doing away with all taper-pointed and cup-headed screws, common in many makes of dies.

LITTLE GIANT SCREW PLATES.

ADJUSTABLE DIES AND COLLETS.



Diameter, 1 $\frac{1}{4}$ Inches.

PRICE LIST.

Size of Gauge	Regular Threads	Threads also Furnished	Dies, Price Each	Taps, Price Each
2	56	48, 64	\$0 60	\$0 35
3	48	40, 56	60	35
4	36	32, 40, 42	60	35
5	36	30, 32, 40	60	35
6	32	30, 36, 38, 40	60	35
7	32	28, 30	60	35
8	32	24, 30	60	35
9	30	24, 28, 32	60	35
10	24	28, 30, 32	60	35
11	24	28, 30	60	35
12	24	20, 22, 28	60	35
13	22	24	60	38
14	20	22, 24	60	38
15	20	18, 22, 24	60	38
16	18	16, 20, 24	60	38
$\frac{3}{32}$	56	48, 52, 54, 60	60	35
$\frac{7}{64}$	56	32, 36, 40, 48	60	35
$\frac{1}{8}$	40	32, 36, 42	60	35
$\frac{9}{64}$	40	30, 32, 36	60	35
$\frac{5}{32}$	32	30, 36	60	35
$\frac{3}{16}$	24	30, 32	60	35
$\frac{7}{32}$	24	30, 32	60	35
$\frac{1}{2}$	20	22, 24	60	45
$\frac{17}{64}$	20	24	60	45
$\frac{9}{32}$	20	24	60	45

Collets, 40 cents; tap wrench, 50 cents; stocks, 70 cents.

LITTLE GIANT SCREW PLATES.

WIRE SIZES.

For Jewelers', Dentists', Tool Makers' and Amateurs' Use.

No.



A1.

Assortment No. A1. Has Stock, Tap Wrench, Taps, Dies and Collets. Cuts $\frac{1}{8}$, $\frac{5}{32}$, $\frac{3}{16}$, $\frac{7}{32}$, $\frac{1}{4}$ Price, \$6.50

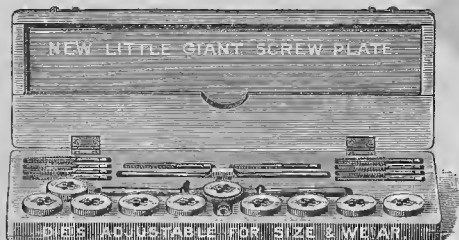
No.



A2.

Assortment No. A2. Cuts $\frac{7}{64}$, $\frac{1}{8}$, $\frac{9}{64}$, $\frac{5}{32}$, $\frac{3}{16}$, $\frac{7}{32}$, $\frac{1}{4}$. Price, \$8.00

No.

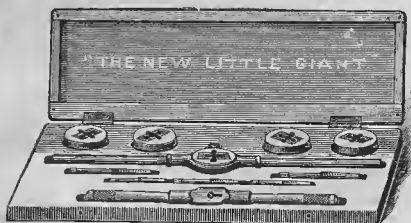


A3.

Assortment No. A3. Cuts $\frac{7}{64}$, $\frac{1}{8}$, $\frac{9}{64}$, $\frac{5}{32}$, $\frac{11}{64}$, $\frac{3}{16}$, $\frac{13}{64}$, $\frac{7}{32}$, $\frac{15}{64}$, $\frac{1}{4}$ Price, \$10.50

If other assortments are wanted, take corresponding number from list on opposite page.

LITTLE GIANT SCREW PLATES.



*Cut showing Assortment No. 1, complete in box,
with Adjustable Tap Wrench.*

Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$. . Price, \$12.00

Length of stock, $14\frac{1}{2}$ inches.



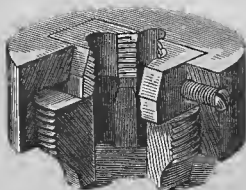
*Cut showing Assortment No. 2, complete in box,
with Adjustable Tap Wrench.*

Cutting $\frac{1}{4}^{20}$, $\frac{3}{8}^{16}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$. . Price, \$13.50

Length of stock, 23 inches.

For list prices of Single Taps, Dies, see page 14.

LITTLE GIANT SCREW PLATES.



*Cut showing Assortment No. 3, complete in box, with
Adjustable Tap Wrench.*

Cutting $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^9$, 1^8 Price, \$15.00
Length of stock, 26 inches.



*Cut showing Assortment No. 4, complete in box, with
Adjustable Tap Wrench.*

Cutting $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^9$, 1^8 Price, \$17.50
Length of stock, 26 inches.

LITTLE GIANT SCREW PLATES.



*Cut showing Assortment No. 5, complete in box,
with Adjustable Tap Wrench.*

Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$.

Price \$16.00

Length of stock, 23 inches.



*Cut showing Assortment No. 6, complete in box,
with Adjustable Tap Wrench.*

Cutting $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^9$, 1^8 .

Price \$22.00

Length of stock, 26 inches.

LITTLE GIANT SCREW PLATES.

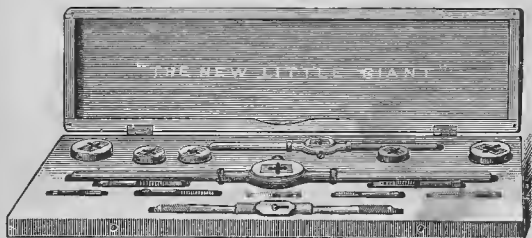


*Cut showing Assortment No. 7, complete in box,
with Adjustable Tap Wrench.*

Cutting $\frac{1}{4}$ ²⁰, $\frac{5}{16}$ ¹⁸, $\frac{3}{8}$ ¹⁶, $\frac{7}{16}$ ¹⁴, $\frac{1}{2}$ ¹², $\frac{5}{8}$ ¹¹, $\frac{3}{4}$ ¹⁰, $\frac{7}{8}$ ⁹, 1⁸.

Price \$25.50

Length of stock, 26 inches.



*Cut showing Assortment No. 8, complete in box,
with Adjustable Tap Wrench.*

Cutting $\frac{1}{4}$ ²⁰, $\frac{5}{16}$ ¹⁸, $\frac{3}{8}$ ¹⁶, $\frac{7}{16}$ ¹⁴, $\frac{1}{2}$ ¹², $\frac{5}{8}$ ¹¹, $\frac{3}{4}$ ¹⁰.

Price \$18.00

Has two stocks:

14½ inches long for the first four sizes; 26 inches
long for the larger sizes.

LITTLE GIANT SCREW PLATES.



*Cut showing Assortment No. 9, complete in box,
with Adjustable Tap Wrench.*

Cutting $\frac{1}{4}$ ²⁰, $\frac{5}{16}$ ¹⁸, $\frac{3}{8}$ ¹⁶, $\frac{7}{16}$ ¹⁴, $\frac{1}{2}$ ¹², $\frac{5}{8}$ ¹¹, $\frac{3}{4}$ ¹⁰, $\frac{7}{8}$ ⁹, 1⁸.

Price \$27.50

Has two stocks:

14 $\frac{1}{2}$ inches long for the first four sizes; 29 inches
long for the larger sizes.



Assortment No. 20.

Cuts $\frac{5}{8}$ ¹¹, $\frac{3}{4}$ ¹⁰, $\frac{7}{8}$ ⁹, 1⁸, 1 $\frac{1}{8}$ ⁷, 1 $\frac{1}{4}$ ⁷ . . Price, \$35.00

Assortment No. 25.

Cuts $\frac{7}{8}$ ⁹, 1⁸, 1 $\frac{1}{8}$ ⁷, 1 $\frac{1}{4}$ ⁷, 1 $\frac{3}{8}$ ⁶, 1 $\frac{1}{2}$ ⁶ . . . Price, \$45.00

Assortment No. 30.

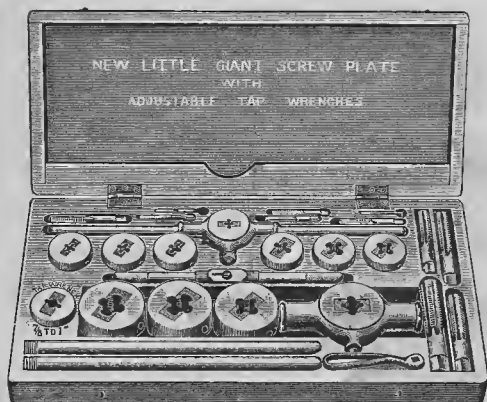
Cuts 1 $\frac{1}{8}$ ⁷, 1 $\frac{1}{4}$ ⁷, 1 $\frac{3}{8}$ ⁶, 1 $\frac{1}{2}$ ⁶ Price, \$37.50

No. 20 has stock 40 inches long.

Nos. 25 and 30 have stocks 52 inches long.

For prices of Adjustable Tap Wrenches, see
page 25.

LITTLE GIANT SCREW PLATES.



Cut showing Assortment No. 40, complete in box, with Adjustable Tap Wrench, holding taps to 1 inch.

Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^9$, 1^8 , $1\frac{1}{8}^7$, $1\frac{1}{4}^7$ Price, \$40.00

Has two stocks:

23 inches long for the first seven sizes; 40 inches long for the largest sizes.

For prices of Adjustable Tap Wrenches, for holding taps of above set larger than 1 inch, see page 25.

LITTLE GIANT SCREW PLATES.



Cut showing Assortment No. 50, complete in box, with Adjustable Tap Wrenches, holding taps to 1 inch.

Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^9$, 1^8 , $1\frac{1}{8}^7$, $1\frac{1}{4}^6$, $1\frac{3}{8}^5$, $1\frac{1}{2}^4$ Price, \$60.00

Has two stocks:

26 inches long for the first nine sizes; 52 inches for the largest sizes.

For prices of Adjustable Tap Wrenches, for holding taps of this set larger than 1 inch, see page 25.

LITTLE GIANT SCREW PLATES.

LIST OF ASSORTMENTS.

Each Assortment is put up in a neat Wood Case, as shown in Cuts.

No. A1	has Stock and Tap Wrench.	Cuts $\frac{1}{8}$, $\frac{5}{32}$, $\frac{3}{16}$, $\frac{7}{32}$, $\frac{1}{4}$			\$ 6.50
No. A2	"	" $\frac{7}{64}$, $\frac{1}{8}$, $\frac{9}{32}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			8.00
No. A3	"	" $\frac{7}{64}$, $\frac{1}{8}$, $\frac{9}{32}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			10.50
No. 1	14½ inches long	" $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			12.00
No. 2	"	" $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			13.50
No. 3	"	" $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			15.00
No. 4	"	" $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			17.50
No. 5	"	" $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			16.00
No. 5½	"	" $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			18.50
No. 6	"	" $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			22.00
No. 7	"	" $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			25.50
No. 8	"	" $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			18.00
No. 9	has Stock 14½ inches long for first four sizes, and 26-inch Stock for the larger sizes.	Cuts $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$			27.50
No. 20	has Stock 40 inches long.	" $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 , $1\frac{1}{8}$, $1\frac{1}{4}$ inches.			35.00
No. 25	"	" $\frac{7}{8}$, 1 , $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$ inches.			45.00
No. 30	"	" $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$ inches.			37.50
No. 40	"	" for first seven sizes, 40-inch Stock for the larger sizes.			40.00
No. 50	has Stock 26 inches long for first nine sizes, 52-inch Stock for the larger sizes.	Cuts $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 , $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{1}{2}$ inches.			60.00

LITTLE GIANT SCREW PLATES.

The preceding pages give a full list of the assortments of these CELEBRATED SCREW PLATES. For durability, convenience, beauty of design and finish, they are unsurpassed by any make of plate.

THEY MAKE PERFECT THREADS AT ONE CUT.

The dies are made on an entirely new principle (see cut on page 2), and are as rigid as solid dies, and yet can be adjusted to cut smaller or larger, by simply tightening or loosening two screws.

Dies adjustable for wear. Perfect threads at one cut. Are made from the best FLAT STEEL, and best materials are used for every part.

Threads are cut and not bruised, and therefore are not raised above the size of the iron. Any part can be duplicated.

Nuts and bolts need not be matched. Nuts can be made to fit tightly or loosely.

The collets have guides for starting the threads true. When necessary to CUT CLOSE UNDER THE HEAD, USE THE FACE SIDE OF THE DIE. Every piece is made to a gauge, and can be shipped from stock.

FOR DOMESTIC TRADE.

Unless otherwise ordered, *plates with V form of thread are sent oversize for rough iron*; U. S. Standard or Whitworth forms of thread, *exact sizes*.

FOR EXPORT.

We furnish either U. S. Standard or Whitworth forms of thread *exact sizes*. These two forms of thread can be used on either rough or exact iron.

PRICES OF TAPS, DIES, ETC.,

FOR THE

LITTLE GIANT SCREW PLATES.



TAPER.

Diameter, Inches	Regular No. of Threads to Inch	Price of Tap	Price of Die	Price of Tap, Die, and Collet for Plates Nos. 1 to 9	Price of Tap, Die, and Collet for Plates Nos. 20, 25, 30, 40, 50
$\frac{3}{16}$	24	\$0 35	\$1 00	\$1 85	. . .
$\frac{1}{4}$	20	45	1 00	1 95	. . .
$\frac{5}{16}$	18	50	1 00	2 00	. . .
$\frac{3}{8}$	16	55	1 25	2 30	. . .
$\frac{7}{16}$	14	60	1 25	2 35	. . .
$\frac{1}{2}$	12	70	1 50	2 70	. . .
$\frac{9}{16}$	12	80	1 50	2 80	. . .
$\frac{5}{8}$	11	90	1 75	3 15	\$ 4 15
$\frac{11}{16}$	11	1 05	1 75	3 30	. . .
$\frac{3}{4}$	10	1 20	2 00	3 70	4 70
$\frac{13}{16}$	10	1 40	2 00	3 90	. . .
$\frac{7}{8}$	9	1 60	2 75	4 85	5 85
$\frac{15}{16}$	9	1 80	2 75	5 05	. . .
1	8	2 00	2 75	5 25	6 25
$1\frac{1}{8}$	7	2 25	4 00	. . .	7 75
$1\frac{1}{4}$	7	2 60	4 00	. . .	8 10
$1\frac{3}{8}$	6	3 00	5 00	. . .	9 50
$1\frac{1}{2}$	6	3 50	5 00	. . .	10 00

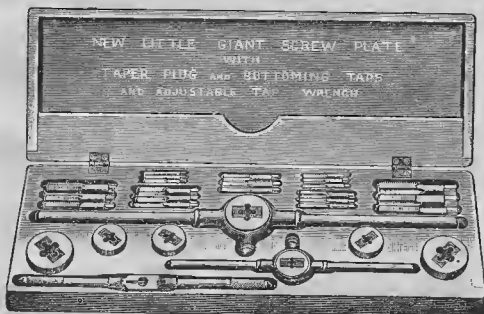
Diameter of Collets, 2, $2\frac{3}{4}$, 4 and $4\frac{1}{2}$ inches.

Left-hand Taps and Dies furnished at same price as right-hand.

For other forms and pitches see page 39.

LITTLE GIANT SCREW PLATES.

MACHINISTS' SETS, WITH TAPER, PLUG AND
BOTTOMING TAPS.



Assortment No. 101. Cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$. Price, \$15.50
With Adjustable Tap Wrench.

Assortment No. 105. Cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$. . \$22.00
With Adjustable Tap Wrench.

Assortment No. 106. Cutting $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 . . . \$31.25
With Adjustable Tap Wrench.

Assortment No. 107. Cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$,
 $\frac{3}{4}$, $\frac{7}{8}$, 1 \$36.00
With Adjustable Tap Wrench.

Assortment No. 108. Cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$. . . \$24.00
With Adjustable Tap Wrench.

Assortment No. 109. Cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$,
 $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 \$38.00
With Adjustable Tap Wrench.

Assortment No. 150. Cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$,
 $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ \$84.00
With Adjustable Tap Wrenches, holding Taps to 1 inch.

Unless otherwise ordered, V form of thread, *exact sizes*, will be sent. U. S. S. or Whitworth forms of thread furnished at same prices, if desired; also rough iron sizes, when ordered.

LITTLE GIANT SCREW PLATES.

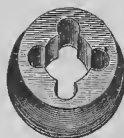
PRICE LIST OF STOCKS.

Stock	7½ in.	long for	collets	1¼ dia.	\$0 70
"	14½	"	"	"	2 " 1 50
"	23	"	"	"	2¾ " 2 00
"	26	"	"	"	2¾ " 2 00
"	29	"	"	"	2¾ " 2 00
"	40	"	"	"	4 " 6 00
"	52	"	"	"	4½ " 8 00

When ordering, give number of assortment you wish stocks for.

PRICE LIST OF COLLETS.

Size of Die	Diam. of Collet	Guide	Cap	Complete
No. A1, 7/8 to 1¼	1¼	\$0 15	\$0 25	\$0 40
" 1, 1¼ to 1½	2	20	30	50
" 6, 1¼ to 1	2¾	20	30	50
" 20, 5/8 to 1¼	4	50	1 00	1 50
" 30, 1½ to 1½	4½	50	1 00	1 50



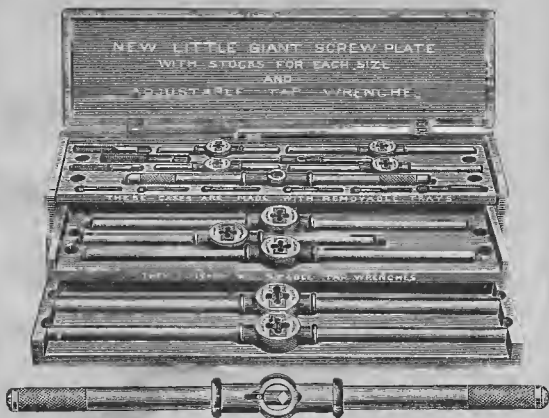
GUIDE



When ordering, give diameter of collet wanted.

LITTLE GIANT FULL-STOCKED SCREW PLATES.

A STOCK FOR EACH DIE.



Each of the following assortments is put up in a neat Wood Case, and contains an Adjustable Tap Wrench suitable for holding taps for each assortment, similar to that shown above.

LIST OF ASSORTMENTS AND PRICES.

No. 61.	Cutting	120, 518, 316, 714, 112	Price, \$12.00
" 62.	"	120, 316, 112, 511, 3	" 15.50
" 65.	"	120, 518, 316, 714, 112, 511, 310	" 18.00
" 65½.	"	120, 518, 316, 714, 112, 511, 310, 16, 8, 2, 12, 16, 4	" 20.50
" 66.	"	316, 714, 112, 511, 310, 79, 18, 8, 16, 2, 8, 11	" 24.00
" 67.	"	120, 518, 316, 714, 112, 511, 310, 79, 18, 8, 16, 2, 8, 11	" 29.50
" 640.	"	120, 518, 316, 714, 112, 511, 310, 79, 18, 117, 117, 8, 16, 2, 8, 11	" 47.00
" 650.	"	120, 518, 316, 714, 112, 511, 310, 79, 18, 117, 117, 136, 116, 8, 16, 2, 8, 11	" 67.00

Numbers 67, 640 and 650 plates have two tap wrenches. These plates are put up (unless otherwise ordered) with V form of thread, rough iron sizes. We also furnish United States Standard or Whitworth forms of thread, if desired, at same list price. Plates of these forms of thread are always sent exact size, unless otherwise ordered.

When ordering, state plainly the number of assortment and form of thread wanted.

For prices of parts, see page 18.

LITTLE GIANT FULL-STOCKED SCREW PLATES.

PRICE LIST OF PARTS.

Size	Die	Guide	Stock	Tap	Size	Die	Guide	Stock	Tap
1/16	\$1 00	\$0 20	\$0 50	\$0 35	1/16	\$2 00	\$0 20	\$0 75	\$1 20
1/8	1 00	20	50	45	1/8	2 00	20	1 00	1 40
3/16	1 00	20	50	50	3/16	2 75	20	1 00	1 60
1/4	1 25	20	50	55	1/4	2 75	20	1 00	1 80
5/16	1 25	20	75	60	5/16	2 75	20	1 00	2 00
3/8	1 50	20	75	70	3/8	4 00	50	1 75	2 25
7/16	1 50	20	75	80	7/16	4 00	50	1 75	2 60
1/2	1 75	20	75	90	1/2	5 00	50	2 25	3 00
3/4	1 75	20	75	1 05	3/4	5 00	50	2 25	3 50

Left-hand threads are furnished at above list prices. Particular attention is called to the guide; this, being removable, can be replaced at a very low cost, and save the expense of purchasing an entire new stock.

The principle of the die and stock is the same as used in our single stock plate, cut of which is shown on page 2.

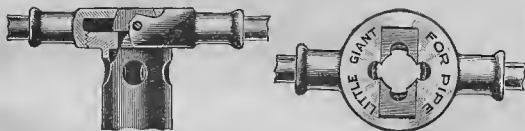
To adjust, simply turn screws in or out, as the adjustment desired requires. We furnish plug or bottoming taps, *instead* of taper, with these plates at same prices, if desired.

V form, rough iron sizes, are sent unless otherwise ordered. U. S. S. or Whitworth forms furnished at same list prices.

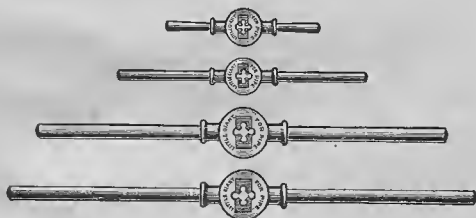
LITTLE GIANT SCREW PLATES.

FOR PIPE.

A Stock, Die and Guide, complete.



Sectional view of Stock, Die and Guide, showing adjustment.



LIST OF SIZES, LENGTHS AND PRICES OF COMPLETE SETS.

No. 80	for	$\frac{1}{8}$ inch	pipe.	Length of stock,	9 inches.	\$1 75
" 81	"	$\frac{1}{4}$	"	"	"	1 75
" 82	"	$\frac{3}{8}$	"	"	"	2 25
" 83	"	$\frac{1}{2}$	"	"	"	2 25
" 84	"	$\frac{3}{4}$	"	"	"	3 00
" 85	"	1	"	"	"	3 00
" 86	"	$1\frac{1}{4}$	"	"	"	4 50
" 87	"	$1\frac{1}{2}$	"	"	"	5 50
" 88	"	2	"	"	"	7 25

When ordering, give number and size. Right-hand dies will always be sent, *unless* otherwise ordered.

LITTLE GIANT SCREW PLATES.

FOR PIPE.

This new departure in stocks and dies for pipe can but recommend itself to all users of this class of tools.

Each die is furnished with a stock and guide, independent of the other sizes, of suitable length and weight. In this way the annoyance of removing dies and adjustment to size is done away with, as every die is in place and true to size, requiring no adjustment except only when the irregularity or variations in the fittings make it necessary.

Dies are made upon the same principle as those used in our celebrated Little Giant Screw Plates for bolts.

These stocks, dies and guides are packed in boxes containing *one* complete set of one size only. Also in sets as shown on page 21.

PRICE LIST OF PARTS OF PIPE SETS.

Size	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Dies	\$1 00	\$1 00	\$1 25	\$1 25	\$1 25	\$1 25	\$2 00	\$2 50	\$3 00
Guides	25	25	25	25	50	50	75	75	75
Stocks	50	50	75	75	1 25	1 25	1 75	2 25	3 50

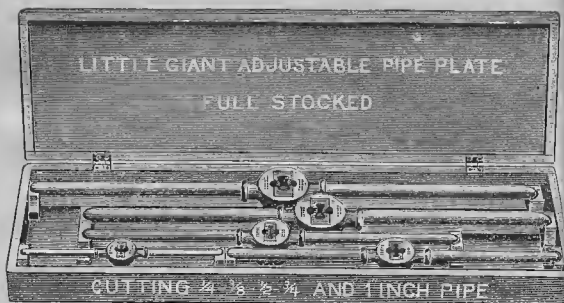
For price list of complete sets see opposite page.

Left-hand dies will fit stocks used for right-hand dies and are sold at above list prices.

Right-hand dies always sent, unless otherwise ordered.

LITTLE GIANT ADJUSTABLE PIPE PLATES.

FULL STOCKED.



LIST OF ASSORTMENTS AND PRICES.

No. P 1. Stocks and Dies, for cutting $\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$.
Price \$8.00

No. P 2. Stocks and Dies, for cutting $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1.
Price \$11.50

No. P 3. Stocks and Dies, for cutting $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$,
1, $1\frac{1}{4}$. Price \$16.00

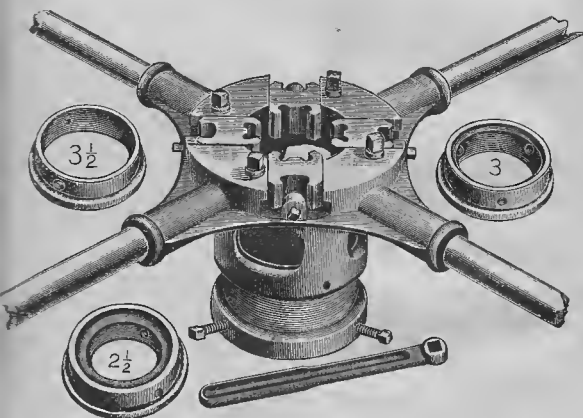
No. P 4. Stocks and Dies, for cutting $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$,
1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2. Price \$28.50

For price of parts, see page 20.

The above assortments are put up in nice wood cases, making a convenient arrangement to keep tools in good shape for immediate use. The fact that each die has an independent stock, does away with the necessity of adjustment each time die is used.

These sets are capable of a large variety of work.

LITTLE GIANT ADJUSTABLE PIPE PLATES.



LIST OF ASSORTMENTS AND PRICES.

No. P 20.	For Pipe $2\frac{1}{2}$ and 3 inches . . .	\$50.00
" P 21.	" " $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4 inches . .	60.00
" P 22.	" " $3\frac{1}{2}$ and 4 inches . . .	50.00

Price of Parts.	Dies, per set of 4 pieces . .	16.00
" "	Bushings, each	1.50
" "	Stock Wrench, each . . . . .	.75
" "	Collar, Set or Leader Screw, each .	.25

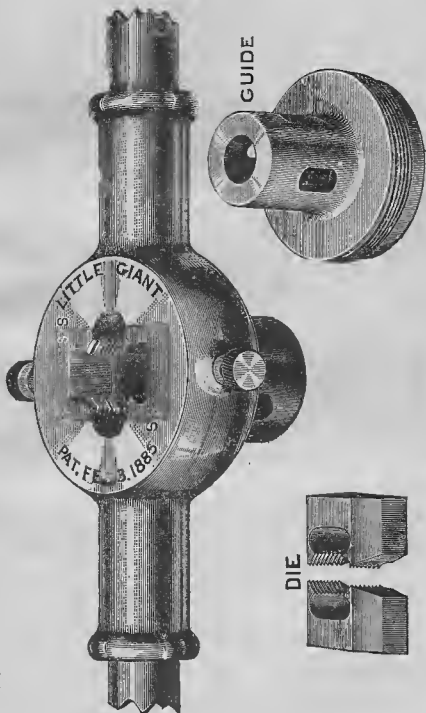
These sets are furnished either for right or left hand.

Unless otherwise ordered, right hand will be sent.

LITTLE GIANT SCREW PLATES.

FOR PIPE.

Material of the finest quality, and workmanship of the highest order.



SECTIONAL VIEW

To change from one size to another, simply screw out the guide, drop out the die, and replace with size die and guide required.

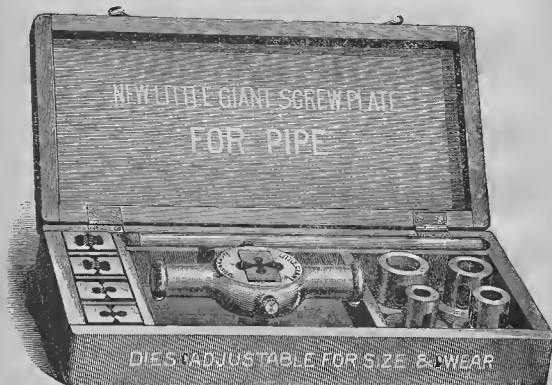
showing parts of plate : A Stock, Die and Guide. The stock has a bevel slot ; the sides of dies are also bevel ; the bevel of die is placed in the bevel of stock, and guide screwed in, which holds die firmly in stock. The thumb screws at ends of dies are used to adjust dies to size and wear, as well as to overcome irregularities in fittings.

LITTLE GIANT SCREW PLATES.

FOR PIPE.

A Solid Die, yet Adjustable.

The introduction of the New Little Giant Patent Adjustable Die for bolts has been so satisfactory that we have adapted its use for pipe.



The guides are interchangeable throughout the set, for convenience in cutting nipples.

Sure to cut the thread straight.

The dies can be re-sharpened.

Dies are adjustable to overcome variation of fittings or pipe.

Dies and guides can be changed quickly.

It is light, yet strong and durable.

Dies are held by bevel. No screws to break or get out of order.

No. 1 Plate. Cutting $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1 inch	\$9.00
Price of Stock, when sold alone	2.00
“ “ Dies, “ “ “ each size	1.25
“ “ Guides, “ “ “ . . . . .	.50

No. 2 Plate. Cutting $1\frac{1}{4}$, $1\frac{1}{2}$, 2 inches	15.00
Price of Stock, when sold alone	5.25
“ “ Dies, “ “ “	3.00
“ “ Guides, “ “ “ . . . . .	.75

This plate is packed same as shown above.

L. H. dies furnished at same prices.

LITTLE GIANT ADJUSTABLE TAP WRENCHES.

LITTLE GIANT TAP AND REAMER WRENCHES.

PRICE LIST AND SIZES.

No. 11		PRICE. \$1.50
------------------	--	------------------

Holds taps from $\frac{3}{4}$ to $\frac{1}{2}$ inch.

No. 13		2.00
------------------	--	------

Holds taps from $\frac{1}{4}$ to $\frac{3}{4}$ inch.

No. 15		2.75
------------------	--	------

Holds taps from $\frac{3}{8}$ to 1 inch.

No. 17		5.00
------------------	--	------

Holds taps from $\frac{3}{4}$ to $1\frac{1}{2}$ inches.

Length : No. 11, $10\frac{1}{2}$ inches ; No. 13, $14\frac{1}{2}$ inches ; No. 15, 22 inches ; No. 17, 40 inches.

Handles are of pipe, making them light. These wrenches are used in our full stocked plates for sizes to $1\frac{1}{2}$ inches. When ordering give number.

LITTLE GIANT TAPS, DIES AND COLLETS.

FOR BIT BRACE USE.



With the Bit Brace Collet and Die, threads can be cut with great rapidity, and it can be used in places where a screw plate cannot; for instance on clips, after they are shaped. Bolts can be dressed over if the threads have been bruised, without removing from place, etc.

PRICES.

Size.	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$
No. of Threads.	24	20	18	16	14
Tap, Die & Collet	\$1 90	\$1 90	\$1 95	\$2 25	\$2 35
Die	\$1 00	\$1 00	\$1 00	\$1 25	\$1 25
Tap	\$0 50	\$0 50	\$0 55	\$0 60	\$0 70

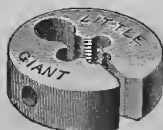
Collets, each 50c.

We send these "V" form of thread, rough iron sizes, number of threads to the inch as per list above.

Exact sizes furnished at same prices. For other forms and pitches see page 39.

LITTLE GIANT SCREW PLATES.

ADJUSTABLE ROUND DIES.



Diameter $1\frac{3}{16}$.

We furnish these dies either $1\frac{3}{16}$ or $\frac{5}{8}$ diameter, in the following sizes and threads.



Diameter $\frac{5}{8}$.

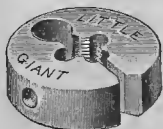
PRICE LIST.

Size of Gauge	No. of Threads to the Inch	Dies, Price Each	Taps, Price Each
No. 1	64	\$0 40	\$0 35
$1\frac{1}{2}$	56	40	35
2	48, 56, 64	40	35
3	40, 48, 56	40	35
4	32, 36, 40, 42	40	35
5	30, 32, 36, 40	40	35
6	30, 32, 36, 40, 38	40	35
7	28, 30, 32	40	35
8	24, 30, 32	40	35
9	24, 28, 30, 32	40	35
10	24, 28, 30, 32	40	35
11	24, 28, 30	40	35
12	20, 22, 24, 28	40	35
13	20, 22, 24	40	38
14	20, 22, 24	40	38
15	18, 20, 22, 24	40	38
16	16, 18, 20, 24	40	38
$3\frac{1}{2}$	48, 56, 60, 54, 52	40	35
$3\frac{7}{8}$	32, 36, 40, 56	40	35
$4\frac{1}{8}$	32, 36, 40, 42	40	35
$4\frac{3}{4}$	30, 32, 36, 40	40	35
$5\frac{1}{2}$	30, 32, 36	40	35
$6\frac{1}{4}$	32, 36, 40	40	35
$6\frac{3}{4}$	24, 30, 32	40	35
$7\frac{1}{8}$	24, 28, 32, 36	40	35
$7\frac{1}{2}$	24, 30, 32	40	35
$8\frac{1}{4}$	24, 28, 32, 36	40	35
$8\frac{3}{4}$	20, 22, 24	40	45
$9\frac{1}{8}$	20, 24	40	45
$9\frac{3}{4}$	20, 24	40	45

Unless otherwise ordered, $1\frac{3}{16}$ diameter will be sent. Dies $1\frac{3}{16}$ diameter are furnished in all sizes in above list. Dies $\frac{5}{8}$ diameter are only furnished in number sizes to 14, fractional $\frac{1}{8}$ to $\frac{7}{8}$.

LITTLE GIANT SCREW PLATES.

ADJUSTABLE ROUND DIES.



1 1/8-inch Diam.



5/8-inch Diam.

The large demand for this class of die plate, for general repairs and bicycle work, has made it seem desirable for us to place the large variety of assortments given on the succeeding pages, upon the market.

We desire to particularly call the attention of purchasers to their completeness. Each assortment is furnished with an adjustable tap wrench, similar to cut here shown, and they are put up in nice wood cases.



Price of Tap Wrenches when sold separately.

Each. \$0.50

Any size or thread in list on page 27 may be substituted for any size or thread in any assortment of complete plates.



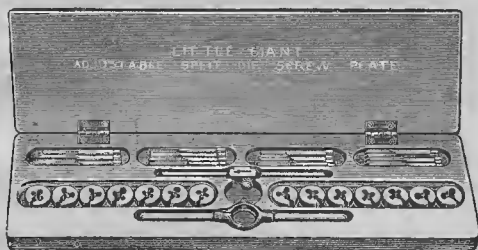
Above cut shows one of the Adjustable Stocks used in the plates.

Price of stock, when sold separately, \$0.75

These dies will fit any make of stock holding dies of these diameters.

LITTLE GIANT SCREW PLATES.

FOR BICYCLE WORK.



LIST OF ASSORTMENTS AND PRICES.

No. B 6. Cutting 6^{38} , $\frac{1}{8}^{40}$, $\frac{1}{8}^{42}$, 3^{48} , $\frac{3}{32}^{54}$, 3^{56} .

Price \$5.00

6 Taps, 6 Dies, Stock and Adjustable Tap Wrench.

No. BB 6. Cutting $\frac{9}{64}^{40}$, $\frac{3}{32}^{56}$, $\frac{7}{64}^{56}$, 2^{48} , $1\frac{1}{2}^{56}$, 1^{64} .

Price \$5.00

6 Taps, 6 Dies, Stock and Adjustable Tap Wrench.

No. B 14. Cutting $\frac{3}{32}^{52}$, $\frac{3}{32}^{54}$, $\frac{3}{32}^{56}$, $\frac{7}{64}^{56}$, $\frac{1}{8}^{40}$, $\frac{1}{8}^{42}$, $\frac{9}{64}^{40}$, 1^{64} , $1\frac{1}{2}^{56}$, 2^{48} , 3^{48} , 3^{56} , 4^{42} , 6^{38} .

Price \$10.00

14 Taps, 14 Dies, Stock and Adjustable Tap Wrench.

Stock, 5 inches long; Die, $\frac{5}{8}$ diameter.

LITTLE GIANT SCREW PLATES.

ADJUSTABLE ROUND SPLIT DIE.

The succeeding pages give a complete list of the large variety of sizes and threads, as well as the great variety of assortments, which we are now prepared to furnish in these Adjustable Round Split Dies. These dies are made so as to fit any make of stock holding these diameters.

The assortments of screw plates are made up of sizes and threads best adapted to meet the demands of trade. All these assortments have our latest improved adjustable tap wrench.



Dies are made $\frac{5}{8}$, $1\frac{3}{8}$ and 1 inch diameter. Parties desiring sizes not contained in regular assortments, can make such assortments as they may desire, from list prices of parts shown in the different lists, and if assortment contains same *number of sizes* as given in list of *assortments*, the price will be the same as asked for plate containing a similar number of sizes.

These plates are sold complete. Each set is put up in a nice wood case.

LITTLE GIANT SCREW PLATES.

WITH ADJUSTABLE ROUND DIES, $\frac{13}{16}$ DIAM.



LIST OF ASSORTMENTS AND PRICES.

No. D 5. Cutting 4^{36} , 6^{32} , 8^{32} , 10^{24} ,
 12^{24} Price, \$5.00
 5 Taps, 5 Dies, Stock and Adjustable Tap Wrench.

No. DD 5. Cutting $\frac{1}{8}^{40}$, $\frac{5}{32}^{36}$, $\frac{3}{16}^{32}$,
 $\frac{7}{32}^{24}$, $\frac{1}{4}^{20}$ Price, \$5.00
 5 Taps, 5 Dies, Stock and Adjustable Tap Wrench.

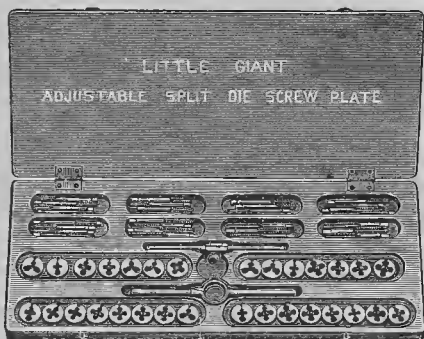
No. D 6. Cutting 4^{36} , 6^{32} , 8^{32} , 10^{24} ,
 12^{24} , 14^{20} Price, \$5.75
 6 Taps, 6 Dies, Stock and Adjustable Tap Wrench.

No. DD 6. Cutting $\frac{1}{8}^{40}$, $\frac{5}{32}^{36}$, $\frac{3}{16}^{32}$,
 $\frac{7}{32}^{24}$, $\frac{1}{4}^{20}$, $\frac{9}{32}^{20}$ Price, \$5.75
 6 Taps, 6 Dies, Stock and Adjustable Tap Wrench.

No. D 7. Cutting 4^{36} , 6^{32} , 8^{32} , 10^{24} ,
 12^{24} , 14^{20} , 16^{18} Price, \$6.50
 7 Taps, 7 Dies, Stock and Adjustable Tap Wrench.

No. DD 7. Cutting $\frac{7}{64}^{48}$, $\frac{1}{8}^{40}$, $\frac{9}{64}^{40}$,
 $\frac{5}{32}^{36}$, $\frac{3}{16}^{32}$, $\frac{7}{32}^{24}$, $\frac{1}{4}^{20}$ Price, \$6.50
 7 Taps, 7 Dies, Stock and Adjustable Tap Wrench.

LITTLE GIANT SCREW PLATES



LIST OF ASSORTMENTS AND PRICES.

No. DD 8. Cutting $\frac{1}{16}^{60}$, $\frac{3}{32}^{48}$, $\frac{1}{8}^{40}$, $\frac{5}{32}^{36}$, $\frac{3}{16}^{32}$, $\frac{7}{32}^{24}$, $\frac{1}{4}^{20}$, $\frac{9}{32}^{20}$ Price, \$7.25

8 Taps, 8 Dies, Stock and Adj. Tap Wrench.

No. D 10. Cutting 2^{56} , 3^{48} , 4^{36} , 5^{32} , 6^{32} , 8^{32} , 10^{32} , 10^{24} , 12^{24} , 14^{20} Price, \$8.75

10 Taps, 10 Dies, Stock and Adj. Tap Wrench.

No. D 14. Cutting 2^{56} , 4^{36} , 6^{32} , 8^{32} , 10^{24} , 12^{24} , 14^{20} , $\frac{7}{64}^{48}$, $\frac{1}{8}^{40}$, $\frac{9}{64}^{40}$, $\frac{5}{32}^{36}$, $\frac{3}{16}^{32}$, $\frac{7}{32}^{24}$, $\frac{1}{4}^{20}$ Price, \$11.50

14 Taps, 14 Dies, Stock and Adj. Tap Wrench.

No. D 30. Cutting $\frac{1}{16}$, $\frac{5}{64}$, $\frac{3}{32}$, $\frac{7}{64}$, $\frac{1}{8}$, $\frac{9}{64}$, $\frac{5}{32}$, $\frac{11}{64}$, $\frac{3}{16}$, $\frac{13}{64}$, $\frac{7}{32}$, $\frac{15}{64}$, $\frac{1}{4}$, $\frac{17}{64}$, $\frac{9}{32}$, and screw gauge sizes Nos. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 Price, \$23.75

30 Taps, 30 Dies, Stock and Adj. Tap Wrench.

Dies used in the foregoing plates are $\frac{1}{16}$ diameter.

LITTLE GIANT SCREW PLATES.

ADJUSTABLE SPLIT DIE.

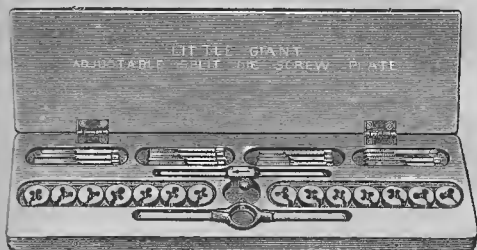


One-inch Diameter Dies.

SIZE OF DIE		Cutting Size	Regu- lar No. of Threads	We also furnish	Price Die, each	Price Tap
Diam.	Thick- ness					
1 inch	$\frac{3}{8}$ inch	No. 4	36	32, 40	\$0 75	\$0 35
1 "	$\frac{3}{8}$ "	5	36	30, 32, 40	75	35
1 "	$\frac{3}{8}$ "	6	32	30, 36, 40	75	35
1 "	$\frac{3}{8}$ "	7	32	28, 30	75	35
1 "	$\frac{3}{8}$ "	8	32	24, 30	75	35
1 "	$\frac{3}{8}$ "	9	30	24, 28, 32	75	35
1 "	$\frac{3}{8}$ "	10	24	28, 30, 32	75	35
1 "	$\frac{3}{8}$ "	11	24	28, 30	75	35
1 "	$\frac{3}{8}$ "	12	24	20, 22, 28	75	35
1 "	$\frac{3}{8}$ "	13	22	20, 24	75	38
1 "	$\frac{3}{8}$ "	14	20	22, 24	75	38
1 "	$\frac{3}{8}$ "	15	20	18, 22, 24	75	38
1 "	$\frac{3}{8}$ "	16	18	16, 20, 24	75	38
1 "	$\frac{3}{8}$ "	17	18	16, 20	75	38
1 "	$\frac{3}{8}$ "	18	18	16, 20	75	38
1 "	$\frac{3}{8}$ "	19	18	16, 20	75	38
1 "	$\frac{3}{8}$ "	20	16	18, 20	75	38
1 "	$\frac{3}{8}$ "	22	16	18	75	38
1 "	$\frac{3}{8}$ "	24	16	14, 18	75	38
1 "	$\frac{3}{8}$ "	1	40	32, 36	75	35
1 "	$\frac{3}{8}$ "	2	40	32, 36	75	35
1 "	$\frac{3}{8}$ "	3	32	36, 40	75	35
1 "	$\frac{3}{8}$ "	4	32	36, 40	75	35
1 "	$\frac{3}{8}$ "	5	24	22, 32, 36	75	35
1 "	$\frac{3}{8}$ "	6	24	22, 32, 36	75	35
1 "	$\frac{3}{8}$ "	7	24	28, 32, 36	75	35
1 "	$\frac{3}{8}$ "	8	24	28, 32, 36	75	35
1 "	$\frac{3}{8}$ "	9	20	16, 18	75	45
1 "	$\frac{3}{8}$ "	10	20	16, 18	75	45
1 "	$\frac{3}{8}$ "	11	18	16, 20	75	50
1 "	$\frac{3}{8}$ "	12	18	16, 20	75	50
1 "	$\frac{3}{8}$ "	13	16	14, 18	75	55
1 "	$\frac{3}{8}$ "	14	16	14, 18	75	55
1 "	$\frac{3}{8}$ "	15	14	16	75	60

LITTLE GIANT SCREW PLATES.

ADJUSTABLE SPLIT DIE, 1 INCH DIAMETER.



LIST OF ASSORTMENTS AND PRICES.

No. F 5. Cutting $\frac{3}{8}^{24}$, $\frac{1}{2}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$ Price, \$7.50
Stock 9 inches long. 5 Dies, 5 Taps, and
Adjustable Tap Wrench.

No. FF 5. Cutting 12^{24} , 14^{20} , 16^{18} , 18^{16} , 20^{16} . . Price, \$7.50
Stock 9 inches long. 5 Dies, 5 Taps, and
Adjustable Tap Wrench.

No. F 6. Cutting $\frac{1}{8}^{40}$, $\frac{3}{16}^{24}$, $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$. . Price, \$8.00
Stock 9 inches long. 6 Dies, 6 Taps, and
Adjustable Tap Wrench.

No. FF 6. Cutting 12^{24} , 14^{20} , 16^{18} , 18^{16} , 20^{16} , 24^{16} , Price, \$8.00
Stock 9 inches long. 6 Dies, 6 Taps, and
Adjustable Tap Wrench.

No. F 11. Cutting $\frac{1}{8}^{40}$, $\frac{5}{32}^{40}$, $\frac{3}{16}^{24}$, $\frac{7}{32}^{24}$, $\frac{1}{4}^{20}$, $\frac{9}{32}^{20}$, $\frac{5}{16}^{18}$, $\frac{11}{32}^{18}$,
 $\frac{3}{8}^{16}$, $\frac{13}{32}^{16}$, $\frac{7}{16}^{14}$ Price, \$15.50
Stock 9 inches long. 11 Dies, 11 Taps, and
Adjustable Tap Wrench.

No. F 12. Cutting 12^{24} , 14^{20} , 16^{18} , 18^{16} , 20^{16} , 24^{16} , $\frac{1}{8}^{40}$, $\frac{3}{16}^{24}$,
 $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$ Price, \$16.00
Stock 9 inches long. 12 Dies, 12 Taps, and
Adjustable Tap Wrench.

Dies in above assortments are 1 inch in diameter.

Each complete plate, as catalogued, sent in wood case.

If other assortments are wanted see list page 33.

LITTLE GIANT SCREW PLATES.

SPLIT DIE HOLDER.



Diameter of Die $\frac{5}{8}$ in.



Holding Dies $\frac{5}{8}$ Diameter.

The demand for a simple and convenient holder for bicycle dies has suggested to us the one shown in above cut. It is arranged for holding any number of dies up to and including 14 sizes. Top of holder screws off. Dies are easily removed. Made of hardwood, finely finished with adjusting screws in a metal holder.

LIST OF ASSORTMENTS AND PRICES.

No.	H6.	$6^{38}, \frac{140}{8}, \frac{142}{8}, \frac{348}{8}, \frac{354}{32}, 3^{56}$	.....	\$3 15
"	HH6.	$\frac{940}{64}, \frac{356}{32}, \frac{756}{64}, 2^{48}, 1\frac{156}{2}, 1^{64}$	.....	3 15
"	H8.	$6^{38}, \frac{140}{8}, \frac{940}{64}, \frac{356}{32}, \frac{348}{8}, 2^{48}, 1\frac{156}{2}, 1^{64}$	.....	3 95
"	H14.	$\frac{352}{32}, \frac{354}{32}, \frac{356}{32}, \frac{756}{64}, \frac{140}{8}, \frac{142}{8}, \frac{940}{64}, 1^{64}, 1\frac{156}{2}, 2^{48}, \frac{348}{8}, \frac{356}{32}, 4^{42}, 6^{38}$	.....	6 3

Extra holders, 75 cents each; dies, 40 cents each.

If other sizes or threads are wanted, select from list, page 27. $\frac{9}{64}$ inch and under fit above holder.

LITTLE GIANT TAP HOLDER.

FOR HOLDING MACHINE SCREW TAPS USED
IN BICYCLE PLATES.



In connection with our Die Holder shown on opposite page, we are pleased to call attention to our Tap Holder shown in above cut. These are made to hold any number of taps up to 14 sizes. Are made of hardwood, finely finished. Top screws off, which permits of the removal of the tap operator desires to use. Jaws of chuck are made of best tool steel. With this wrench one can get closer into corners and between spokes. Users of this class of tools will at once appreciate its convenience.

LIST OF ASSORTMENTS AND PRICES.

No. J 6.	6 ³⁸ , ¹⁴⁰ / ₈ , ¹⁴² / ₈ , 3 ⁴⁸ , ³² / ₅₄ , 3 ⁵⁶ .	\$1.90
" JJ 6.	⁹⁴⁰ / ₆₄ , ³² / ₅₆ , ⁷ / ₆₄ , 2 ⁴⁸ , 1 ⁵⁶ / ₂ , 1 ⁶⁴ .	1.90
" J 8.	6 ³⁸ , ¹⁴⁰ / ₈ , ⁹⁴⁰ / ₆₄ , ³² / ₅₆ , 3 ⁴⁸ , 2 ⁴⁸ , 1 ⁵⁶ / ₂ , 1 ⁶⁴ .	2.20
" J 14.	³² / ₅₂ , ³² / ₅₄ , ³² / ₅₆ , ⁷ / ₆₄ , ¹⁴⁰ / ₈ , ¹⁴² / ₈ , ⁹⁴⁰ / ₆₄ , 1 ⁶⁴ , 1 ⁵⁶ / ₂ , 2 ⁴⁸ , 3 ⁴⁸ , 3 ⁵⁶ , 4 ⁴² , 6 ³⁸ .	3.10
Tap Holders, when sold separately		1.00

If other sizes or threads are wanted, select from list, page 27.
³/₄ inch and under fit above holder.

READ THIS PAGE CAREFULLY.

Machinists' (TAPER, PLUG and BOTTOMING), also MACHINE NUT TAPS, of "V" and U. S. Standard form of thread, EXACT and ROUGH IRON SIZES, up to and including 2 inches in diameter, are kept in stock.

Sizes above 2 inches are made to order.

ORDERS FOR TAPS AND DIES

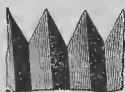
will be filled with the following number of threads to the inch, *unless otherwise ordered* :

SIZE	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$	$\frac{13}{16}$	2
V	20	18	16	14	12	12	11	11	10	10	9
U.S.S.	20	18	16	14	13	12	11	11	10	10	9

SIZE	$\frac{15}{16}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{5}{8}$	$1\frac{3}{4}$	$1\frac{7}{8}$	2
V	9	8	7	7	6	6	$5\frac{1}{2}$	5	5	$4\frac{1}{2}$
U.S.S.	9	8	7	7	6	6	$5\frac{1}{2}$	5	5	$4\frac{1}{2}$

OUR ROUGH IRON SIZES

are : $\frac{1}{84}$ over for all sizes under $\frac{7}{16}$, and $\frac{1}{32}$ over for all other sizes for plates. For machines, $\frac{1}{32}$ over for all sizes.



V
Thread



Whitworth
Thread.



U. S. Standard
Thread.

TAPS AND DIES

of unusual form of thread and odd dimensions are furnished to order at *special prices*.

IN ORDERING TAPS

mention the exact diameter, form of thread, number of threads to the inch.

If Hand Taps, state whether *Taper*, *Plug* or *Bottoming*.

If Stay Bolt Taps, follow instructions on page 50.

If Pulley Taps, give full length.

ALL TAPS AND DIES,

of whatever *form*, *size* or *pitch*, which do not appear in the several price lists, are *special*, and prices will be quoted on application.

We fill all orders for Screw Plates, Taps and Dies with *V form of thread*, rough iron size, unless otherwise ordered. Exact sizes furnished, if desired.




We fill all orders for Screw Plates, Taps and Dies with *United States Standard* and *Whitworth form of threads*, exact sizes, unless otherwise ordered.

LITTLE GIANT TAPS AND DIES.

NOTICE.

The attention of users of taps and dies is particularly called to the following list of sizes and threads which we furnish as regular, also specials that we furnish at regular prices.

FOR PRICES SEE OTHER PAGES.

Diameter	 V Thread		 U. S. Standard Thread		 Whitworth Thread
	Regu- lar	We also fur- nish	Regu- lar	We also fur- nish	Regu- lar
3/16	24	32	24		24
1/4	20	18, 22, 24	20		20
5/16	18	16, 20	18		18
3/8	16	14, 18	16		16
7/16	14	12, 16	14		14
1/2	12	13, 14	13	12	12
5/8	12	11, 14	12		12
3/4	11	10, 12	11	10	11
7/8	11	10, 12	11		11
1	10	11, 12	10		10
1 1/16	10	9, 12	10		10
1 1/8	9	10, 12	9		9
1 1/4	9	10, 12	9		9
1 1/2	8	9, 10, 12	8		8
1 3/4	7	8, 10, 12	7		7
2	7	8, 10, 12	7		7
2 1/16	6		6		6
2 1/8	6		6		6
2 1/4	5	5 1/2	5 1/2		5
2 3/8	5		5		5
2 1/2	4 1/2	5	4 1/2		4 1/2
2 5/8	4 1/2	5	4 1/2		4 1/2
3	4 1/2		4 1/2		4
3 1/16	4		4		4
3 1/8	4		4		4
3 1/4	4		4		4
3 3/8	4		4		4
3 1/2	4		4		3 1/2
3 3/4	3 1/2		3 1/2		3 1/2
4	3 1/2		3 1/2		3 1/2
4 1/16	3 1/2		3 1/2		3 1/2
4 1/8	3 1/2		3 1/2		3 1/2
4 1/4	3 1/2		3 1/2		3 1/2
4 3/8	3 1/2		3 1/2		3 1/2
4 1/2	3 1/2		3 1/2		3 1/2
4 3/4	3 1/2		3 1/2		3 1/2
5	3		3		3
5 1/16	3		3		3
5 1/8	3		3		3
5 1/4	3		3		3
5 3/8	3		3		3
5 1/2	3		3		3
5 3/4	3		3		3
6	3		3		3

Prices on specials quoted on application. Orders for specials should be accompanied with stub with nut fitted to same.

LITTLE GIANT TAPS.

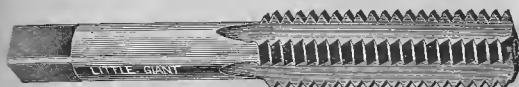
MACHINISTS' HAND TAPS.



TAPER.



PLUG.



BOTTOMING.

Diameter.	No. of Threads to inch, V form	Price, Each	Price, Per Set
$\frac{3}{16}$	24, 32	\$0 35	\$1 05
$\frac{1}{4}$	18, 20, 22, 24	45	1 35
$\frac{5}{16}$	16, 18, 20	50	1 50
$\frac{3}{8}$	14, 16, 18	55	1 65
$\frac{7}{16}$	12, 14, 16	60	1 80
$\frac{1}{2}$	12, 13, 14	70	2 10
$\frac{5}{8}$	11, 12, 13	80	2 40
$\frac{3}{4}$	10, 11, 12	90	2 70
$\frac{7}{8}$	10, 11, 12	1 05	3 15
1	10, 11, 12	1 20	3 60
$1\frac{1}{8}$	9, 10, 12	1 40	4 20
$1\frac{1}{4}$	9, 10, 12	1 60	4 80
$1\frac{3}{8}$	9, 10, 12	1 80	5 40
1	8, 12,	2 00	6 00
$1\frac{1}{2}$	7, 10, 12	2 25	6 75
$1\frac{3}{4}$	7, 10, 12	2 60	7 80
$1\frac{7}{8}$	6	3 00	9 00
2	6	3 50	10 50
	5, $5\frac{1}{2}$	4 20	12 60
	5	5 00	15 00
	$4\frac{1}{2}$, 5	5 80	17 40
	$4\frac{1}{2}$	6 70	20 10

For other forms of thread see page 39. U. S. S. or Whitworth forms of thread, of regular pitch, as shown on page 39, furnished at same list prices.

LITTLE GIANT TAPS.

MACHINE NUT TAPS.

U. S. S. and Whitworth forms of thread of regular pitch, as shown on page 39, furnished at same list prices.

PRICES AND DIMENSIONS.

Sizes	Price, Each	Whole Length	Number of Threads to in., V form
$\frac{3}{16}$	\$0 60	4 in.	24, 32
$\frac{1}{4}$	60	$4\frac{1}{2}$ "	18, 20, 22, 24
$\frac{5}{16}$	70	$5\frac{1}{8}$ "	16, 18, 20
$\frac{3}{8}$	80	$5\frac{3}{4}$ "	14, 16, 18
$\frac{7}{16}$	90	$6\frac{3}{8}$ "	12, 14, 16
$\frac{1}{2}$	1 00	7 "	12, 13, 14
$\frac{9}{16}$	1 15	$7\frac{3}{4}$ "	11, 12, 14
$\frac{5}{8}$	1 30	$8\frac{1}{2}$ "	10, 11, 12
$\frac{11}{16}$	1 45	$9\frac{1}{4}$ "	10, 11, 12
$\frac{3}{4}$	1 60	$9\frac{1}{4}$ "	10, 11, 12
$\frac{13}{16}$	1 80	10 "	9, 10
$\frac{7}{8}$	2 10	10 "	9, 10, 12
$\frac{15}{16}$	2 40	11 "	8, 9, 12
1	2 80	11 "	8, 9, 12
$1\frac{1}{8}$	3 20	13 "	7, 8, 10, 12
$1\frac{1}{4}$	3 70	13 "	7, 10, 12
$1\frac{3}{8}$	4 20	14 "	6, 10, 12
$1\frac{1}{2}$	4 70	14 "	6, 10, 12
$1\frac{5}{8}$	5 30	$14\frac{3}{4}$ "	5, $5\frac{1}{2}$
$1\frac{3}{4}$	6 00	$15\frac{1}{2}$ "	5
$1\frac{7}{8}$	6 80	$16\frac{1}{4}$ "	$4\frac{1}{2}$, 5
2	7 70	17 "	$4\frac{1}{2}$, 5
$2\frac{1}{8}$	9 00	18 "	$4\frac{1}{2}$
$2\frac{1}{4}$	10 20	18 "	$4\frac{1}{2}$
$2\frac{3}{8}$	11 50	19 "	$4\frac{1}{2}$
$2\frac{1}{2}$	12 50	19 "	4
$2\frac{5}{8}$	14 00	$19\frac{1}{2}$ "	4
$2\frac{3}{4}$	15 00	$19\frac{1}{2}$ "	4
$2\frac{7}{8}$	16 50	21 "	4
3	18 00	21 "	$3\frac{1}{2}$
$3\frac{1}{8}$	19 75	21 "	$3\frac{1}{2}$
$3\frac{1}{4}$	21 50	21 "	$3\frac{1}{2}$
$3\frac{3}{8}$	23 00	21 "	$3\frac{1}{2}$
$3\frac{1}{2}$	25 00	21 "	$3\frac{1}{4}$
$3\frac{5}{8}$	27 00	21 "	$3\frac{1}{4}$
$3\frac{3}{4}$	29 50	21 "	3
$3\frac{7}{8}$	31 00	21 "	3
4	33 50	21 "	3

LITTLE GIANT TAPS.

PLUG MACHINE TAPS.

U. S. S. and Whitworth forms of thread of regular pitch, as shown on page 39, furnished at same list prices.

PRICES AND DIMENSIONS.



Sizes	Price, Each	Whole Length	Number of Threads to in., V form
$\frac{3}{16}$	\$0 60	4 in.	24,
$\frac{1}{4}$	60	4 $\frac{1}{2}$ "	18, 20, 22, 24
$\frac{5}{16}$	70	5 $\frac{1}{8}$ "	16, 18, 20
$\frac{3}{8}$	80	5 $\frac{3}{4}$ "	14, 16, 18
$\frac{7}{16}$	90	6 $\frac{3}{8}$ "	12, 14, 16
$\frac{1}{2}$	1 00	7 "	12, 13, 14
$\frac{9}{16}$	1 15	7 $\frac{3}{4}$ "	11, 12, 14
$\frac{5}{8}$	1 30	8 $\frac{1}{2}$ "	10, 11, 12
$\frac{11}{16}$	1 45	9 $\frac{1}{4}$ "	10, 11, 12
$\frac{3}{4}$	1 60	9 $\frac{1}{2}$ "	10, 11, 12
$\frac{13}{16}$	1 80	10 "	9, 10
$\frac{7}{8}$	2 10	10 "	9, 10, 12
$\frac{15}{16}$	2 40	11 "	8, 9, 12
1	2 80	11 "	8, 9, 12
$1\frac{1}{8}$	3 20	13 "	7, 8, 10, 12
$1\frac{1}{4}$	3 70	13 "	7, 10, 12
$1\frac{3}{8}$	4 20	14 "	6, 10, 12
$1\frac{1}{2}$	4 70	14 "	6, 10, 12
$1\frac{5}{8}$	5 30	14 $\frac{3}{4}$ "	5, 5 $\frac{1}{2}$
$1\frac{3}{4}$	6 00	15 $\frac{1}{2}$ "	5
$1\frac{7}{8}$	6 80	16 $\frac{1}{4}$ "	4 $\frac{1}{2}$, 5
2	7 70	17 "	4 $\frac{1}{2}$, 5
$2\frac{1}{8}$	9 00	18 "	4 $\frac{1}{2}$
$2\frac{1}{4}$	10 20	18 "	4 $\frac{1}{2}$
$2\frac{3}{8}$	11 50	19 "	4 $\frac{1}{2}$
$2\frac{1}{2}$	12 50	19 "	4
$2\frac{5}{8}$	14 00	19 $\frac{1}{2}$ "	4
$2\frac{3}{4}$	15 00	19 $\frac{1}{2}$ "	4
$2\frac{7}{8}$	16 50	21 "	4
3	18 00	21 "	3 $\frac{1}{2}$
$3\frac{1}{8}$	19 75	21 "	3 $\frac{1}{2}$
$3\frac{1}{4}$	21 50	21 "	3 $\frac{1}{2}$
$3\frac{3}{8}$	23 00	21 "	3 $\frac{1}{2}$
$3\frac{1}{2}$	25 00	21 "	3 $\frac{1}{2}$
$3\frac{5}{8}$	27 00	21 "	3 $\frac{1}{2}$
$3\frac{3}{4}$	29 50	21 "	3
$3\frac{7}{8}$	31 00	21 "	3
4	33 50	21 "	3

LITTLE GIANT TAPS.

MACHINE SCREW TAPS.



Approximate Diameter, Fractions of an Inch	Screw Gauge Sizes	PRICES		Number of Threads to Inch
		Each	Per Doz.	
	No. 1	\$0 35	\$4 00	56, 60, 64, 72
	" 2	35	4 00	48, 56, 64
	" 3	35	4 00	40, 44, 48, 56
$\frac{7}{64}$	" 4	35	4 00	30, 32, 36, 40, 42, 44, 48
	" 5	35	4 00	30, 32, 36, 40, 44, 48
$\frac{9}{64}$	" 6	35	4 00	30, 32, 36, 38, 40, 44, 48
	" 7	35	4 00	24, 28, 30, 32, 36, 40
$\frac{5}{32}$	" 8	35	4 00	24, 30, 32, 36, 40, 44
	" 9	35	4 00	24, 28, 30, 32
$\frac{3}{16}$	" 10	35	4 00	20, 22, 24, 28, 30, 32, 36
	" 11	35	4 00	22, 24, 28, 30
$\frac{7}{32}$	" 12	35	4 00	20, 22, 24, 26, 28, 30, 32, 34, 36
	" 13	38	4 40	20, 22, 24, 32
$\frac{1}{2}$	" 14	38	4 40	16, 18, 20, 22, 24, 26
	" 15	38	4 40	18, 20, 22, 24
$\frac{17}{64}$	" 16	38	4 40	16, 18, 20, 22, 24, 26
	" 17	38	4 40	16, 18, 20
$\frac{9}{32}$	" 18	38	4 40	16, 18, 20, 22, 24, 26
	" 19	38	4 40	16, 18, 20, 22, 24
$\frac{5}{16}$	" 20	45	5 30	16, 18, 20, 22, 24
	" 22	45	5 30	16, 18
$\frac{3}{8}$	" 24	45	5 30	14, 16, 18, 20, 22, 24
	" 26	53	6 30	14, 16
	" 28	53	6 30	14, 16
	" 30	53	6 30	14, 16

Less than six of a size will be charged as single taps.

Other SIZES AND THREADS are special. Prices on application.

When ordered, taps will be furnished in sets—Taper, Plug and Bottoming—like sets of Hand Taps.

LIST SHOWING DRILLS

TO BE USED FOR MACHINE SCREW TAPS.

*These Drills will give a thread full enough
for all practical purposes, but not a
perfectly full thread*

Sizes of Taps	No. of Threads	Sizes of Drills	Sizes of Taps	No. of Threads	Sizes of Drills
2	48	48	12	24	19
2	56	46	13	20	17
2	64	45	13	24	15
3	40	48	14	20	14
3	48	47	14	22	13
3	56	45	14	24	11
4	32	45	15	18	12
4	36	43	15	20	10
4	40	42	15	24	7
5	30	41	16	16	10
5	32	40	16	18	7
5	36	38	16	20	5
5	40	36	16	24	1
6	30	39	17	16	7
6	32	37	17	18	4
6	36	35	17	20	2
6	40	33	18	16	2
7	28	32	18	18	1
7	30	31	18	20	B
7	32	30	19	16	C
8	24	31	19	18	D
8	30	30	19	20	E
8	32	29	20	16	E
9	24	29	20	18	E
9	28	27	20	20	F
9	30	26	22	16	H
9	32	24	22	18	I
10	24	26	24	14	K
10	28	24	24	16	L
10	30	23	24	18	M
10	32	21	26	14	O
11	24	20	26	16	P
11	28	19	28	14	R
11	30	18	28	16	S
12	20	21	30	14	T
12	22	19	30	16	U

PULLEY TAPS.



LITTLE GIANT TAPS.

PRICE EACH.

Sizes	No. of Threads to Inch	6 Inches	8 Inches	10 Inches	12 Inches	14 Inches	16 Inches	18 Inches	20 Inches	22 Inches	24 Inches
$\frac{3}{8}$	14, 16	\$0 80	\$0 90	\$1 10	\$1 30	\$1 40	\$1 60	\$1 80			
$\frac{7}{16}$	14, 16	90	1 00	1 20	1 40	1 50	1 70	1 90			
$\frac{1}{2}$	12, 13	1 00	1 30	1 40	1 50	1 60	1 80	2 00	\$2 20		
$\frac{9}{16}$	12, 13	1 10	1 35	1 45	1 55	1 70	1 85	2 10	2 30	\$2 50	
$\frac{5}{8}$	10, 11	1 20	1 40	1 50	1 60	1 75	1 90	2 20	2 40	2 60	\$2 80
$1\frac{1}{16}$	10, 11		1 50	1 55	1 70	2 00	2 10	2 30	2 50	2 70	2 90
$1\frac{3}{4}$	10			1 60	1 80	2 10	2 30	2 50	2 70	2 90	3 10
$1\frac{3}{8}$	10			1 80	2 00	2 30	2 50	2 70	2 90	3 10	3 30
$\frac{15}{16}$	9, 10			2 10	2 30	2 50	2 70	2 90	3 10	3 30	3 50
$1\frac{5}{8}$	9, 10			2 40	2 55	2 70	2 90	3 10	3 30	3 50	3 70
1	8			2 80	3 00	3 20	3 40	3 60	3 80	4 00	4 20

These will be sent *exact* sizes, V form of thread. Other sizes and threads furnished at special prices. U. S. S. form of thread of regular pitch, as shown on page 39, furnished at same list prices.

LITTLE GIANT TAPS.

Diameter, Inches	Number of Threads to Inch	Length of Thread in Inches	PRICE, EACH, WHOLE LENGTH		
			11 Inches	12 Inches	14 Inches
$\frac{1}{4}$	20	$1\frac{1}{2}$	\$0 70	\$0 75	\$0 80
$\frac{5}{16}$	18, 16	$1\frac{3}{4}$	80	85	90
$\frac{3}{8}$	14, 16	2	90	95	1 00
$\frac{7}{16}$	12, 14, 16	2	1 00	1 05	1 15
$\frac{1}{2}$	12, 13, 14	$2\frac{1}{4}$	1 12	1 15	1 25
$\frac{9}{16}$	12, 14	$2\frac{1}{2}$	1 30	1 35	1 45
$\frac{5}{8}$	10, 11, 12	$2\frac{3}{4}$	1 45	1 50	1 65
$\frac{3}{4}$	11, 12	3	1 62	1 70	1 80
$\frac{7}{8}$	10	$3\frac{1}{4}$	1 80	1 85	2 00
$1\frac{1}{8}$	10	$3\frac{1}{2}$	2 05	2 10	2 25
$1\frac{3}{8}$	9	$3\frac{3}{4}$	2 35	2 45	2 60
$1\frac{1}{2}$	9	$4\frac{1}{4}$	2 70	2 75	3 00
$1\frac{5}{8}$	8	$4\frac{1}{2}$	3 15	3 20	3 50
1		5			

LITTLE GIANT TAPS.

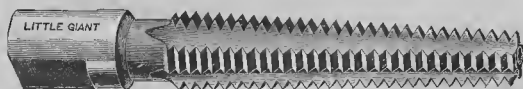
BIT BRACE TAPS.



Sizes	Price, each	No. of Threads	Sizes	Price, each	No. of Threads
$\frac{3}{16}$	\$0.50	24	$\frac{3}{8}$	\$0.60	14, 16
$\frac{1}{4}$	.50	16, 18, 20	$\frac{7}{16}$	.70	12, 14
$\frac{5}{16}$	.55	16, 18	$\frac{1}{2}$	.80	12, 13

Bit Brace Taps will be sent oversize, V form of thread, unless otherwise ordered.

BLACKSMITHS' TAPER TAPS.



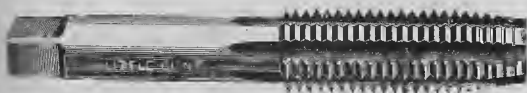
These are packed in boxes $\frac{1}{4}$ to $\frac{3}{4}$ six, $\frac{7}{8}$ four, 1 to $1\frac{1}{2}$ two, in each box.

Sizes	Price, each	No. of Threads	Sizes	Price, each	No. of Threads
$\frac{1}{4}$	\$0.30	16, 18, 20, 22, 24, 26	$\frac{5}{8}$	\$0.50	10, 11, 12, 14
$\frac{5}{16}$	.30	14, 16, 18, 20, 22	$\frac{3}{4}$	.65	7, 8, 9, 10, 12
$\frac{3}{8}$	.35	12, 14, 16, 18	$\frac{7}{8}$	.90	8, 9, 10
$\frac{7}{16}$	.40	12, 14, 16, 18	1	1.25	7, 8, 9, 10
$\frac{1}{2}$	.40	10, 12, 13, 14, 16	$1\frac{1}{4}$	1.75	6, 7, 8, 9
$\frac{9}{16}$	.50	10, 12, 14	$1\frac{1}{2}$	3.00	6, 7, 8

Other threads furnished at special prices.

LITTLE GIANT TAPS.

SHORT PLUG HOB TAPS, FOR OPEN DIES.



Sizes	Prices	Regular No. of Threads, V Form	Sizes	Prices	No. of Threads
$\frac{3}{16}$	\$0 60	24	$\frac{7}{8}$	\$2 10	9
$\frac{1}{4}$	60	20	$\frac{1}{16}$	2 40	9
$\frac{5}{16}$	70	18	1	2 80	8
$\frac{3}{8}$	80	16	$1\frac{1}{8}$	3 20	7
$\frac{7}{16}$	90	14	$1\frac{1}{4}$	3 70	7
$1\frac{1}{2}$	1 00	12	$1\frac{3}{8}$	4 20	6
$1\frac{9}{16}$	1 15	12	$1\frac{1}{2}$	4 70	6
$1\frac{5}{8}$	1 30	11	$1\frac{5}{8}$	5 30	5
$1\frac{1}{16}$	1 45	11	$1\frac{3}{4}$	6 00	5
$1\frac{3}{4}$	1 60	10	$1\frac{7}{8}$	6 80	5
$1\frac{13}{16}$	1 80	10	2	7 70	4½

LONG TAPER HOB TAPS, FOR SOLID DIES.



Sizes	Prices	No. of Threads	Sizes	Prices	No. of Threads
$\frac{3}{16}$	\$0 75	24	$\frac{7}{8}$	\$2 60	9
$\frac{1}{4}$	75	20	$\frac{1}{16}$	3 00	9
$\frac{5}{16}$	85	18	1	3 50	8
$\frac{3}{8}$	1 00	16	$1\frac{1}{8}$	4 00	7
$\frac{7}{16}$	1 15	14	$1\frac{1}{4}$	4 60	7
$1\frac{1}{2}$	1 25	12	$1\frac{3}{8}$	5 25	6
$1\frac{9}{16}$	1 45	12	$1\frac{1}{2}$	5 90	6
$1\frac{5}{8}$	1 60	11	$1\frac{5}{8}$	6 60	5
$1\frac{1}{16}$	1 80	11	$1\frac{3}{4}$	7 50	5
$1\frac{3}{4}$	2 00	10	$1\frac{7}{8}$	8 50	5
$1\frac{13}{16}$	2 25	10	2	9 60	4½

For other forms and pitches see page 39.

LITTLE GIANT TAPS.

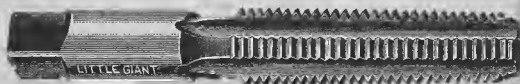
STOVE BOLT TAPS.



These taps are made to correspond in sizes and threads to the American Screw Company's stove bolts. Other sizes and threads will be charged as special.

Sizes	Price, Each	Per Doz.	No. of Threads	Sizes	Price, Each	Per Doz.	No. of Threads
$\frac{5}{32}$	\$0 35	\$4 00	28	$\frac{1}{4}$	\$0 38	\$4 40	18
$\frac{3}{16}$	35	4 00	24	$\frac{5}{16}$	38	4 40	18
$\frac{7}{32}$	35	4 00	22	$\frac{3}{8}$	45	5 30	16

PATCH BOLT TAPS FOR BOILER MAKERS.



Sizes	Price, Each	No. of Threads	Sizes	Price, Each	No. of Threads
$\frac{1}{2}$	\$0 70	12	$\frac{13}{16}$	\$1 40	12
$\frac{9}{16}$	80	12	$\frac{7}{8}$	1 60	12
$\frac{5}{8}$	90	12	$\frac{15}{16}$	1 80	12
$\frac{11}{16}$	1 05	12	1	2 00	12
$\frac{3}{4}$	1 20	12			

These taps are slightly tapered to make a steam-tight fit.

Size given is size of tap at about $\frac{5}{8}$ inch from large end of thread.

STAY BOLT TAPS.



PRICE EACH

Diameter

Diameter	16 in.	18 in.	21 in.	24 in.	27 in.	30 in.	33 in.	36 in.	39 in.	42 in.	48 in.	54 in.
2, 13, 18, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2	\$ 5 60	\$ 7 20	\$ 8 00	\$ 8 80	\$10 90	\$13 00	\$14 00	\$15 00	\$16 50	\$18 00	\$19 00	\$20 00
1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2	\$ 6 60	\$ 8 50	\$ 9 35	\$10 20	\$12 25	\$14 25	\$15 40	\$16 50	\$18 00	\$19 75	\$21 00	\$22 25
1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2	\$ 7 60	\$ 9 50	\$10 35	\$11 20	\$13 25	\$15 25	\$16 40	\$17 50	\$20 00	\$22 00	\$23 50	\$25 00
1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2	\$ 9 00	\$10 50	\$12 00	\$12 75	\$14 75	\$16 50	\$18 00	\$19 50	\$22 00	\$24 00	\$25 50	\$27 00
1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2	\$11 00	\$12 50	\$14 00	\$15 00	\$17 00	\$18 50	\$20 00	\$21 50	\$24 00	\$26 00	\$28 00	\$30 00
1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2, 1 1/4, 1 1/2, 1 3/4, 1 1/2	\$13 00	\$14 50	\$16 00	\$17 00	\$19 00	\$20 00	\$22 00	\$23 50	\$26 00	\$28 00	\$30 00	\$32 00

All orders for these taps should give exact diameter and number of threads per inch, also length of parts A, B, C, D and E. Unless otherwise ordered, we shall send these taps with twelve threads to the inch. We carry in stock taps $\frac{3}{4}$, $\frac{7}{8}$ and 1 inch diameter, twelve threads to the inch, 16, 18, 24, 30, 36 and 42 inches long. These taps are proportioned as follows: *One-third* shank, *one-sixth* straight, *one-sixth* taper, *one-third* reamer. Other proportions, lengths and sizes furnished on orders, with dispatch. If not in immediate need, send for our prices for future reference.

LITTLE GIANT TAPS.

STRAIGHT BOILER TAPS.

SIZES AND PRICES.

12 sharp V threads to the inch.



STRAIGHT
BOILER TAP.

Diam.	Price.
$\frac{1}{2}$	\$1 00
$\frac{17}{32}$	1 00
$\frac{9}{16}$	1 15
$\frac{19}{32}$	1 15
$\frac{5}{8}$	1 30
$\frac{21}{32}$	1 30
$\frac{11}{16}$	1 45
$\frac{23}{32}$	1 45
$\frac{3}{4}$	1 60
$\frac{25}{32}$	1 60
$\frac{13}{16}$	1 80
$\frac{27}{32}$	1 80
$\frac{7}{8}$	2 10
$\frac{29}{32}$	2 10
$\frac{15}{16}$	2 40
$\frac{31}{32}$	2 40
1	2 80
$1\frac{1}{32}$	2 80
$1\frac{1}{16}$	3 00
$1\frac{3}{32}$	3 00
$1\frac{1}{8}$	3 20
$1\frac{5}{32}$	3 20
$1\frac{3}{16}$	3 40
$1\frac{7}{32}$	3 40
$1\frac{1}{4}$	3 70

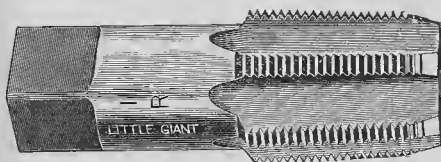
The tap has a reamer point to size the hole and to serve as a gauge in selecting a drill to precede the tap. It has been adopted by many parties who formerly used the taper tap.

LITTLE GIANT PIPE TAPS AND REAMERS.

PIPE REAMERS.



PIPE TAPS.



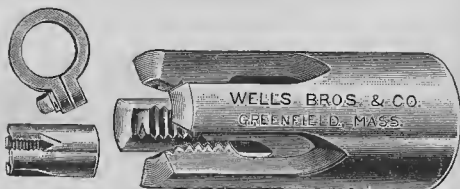
PRICES OF PIPE TAPS AND REAMERS.

Sizes,	$\frac{1}{8}$ in.	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$\frac{1}{2}$ in.	$\frac{3}{4}$ in.	1 in.	$1\frac{1}{4}$ in.
Prices,	\$1.12	\$1.25	\$1.50	\$1.87	\$2.50	\$3.12	\$3.75

Sizes,	$1\frac{1}{2}$ in.	2 in.	$2\frac{1}{2}$ in.	3 in.	$3\frac{1}{2}$ in.	4 in.
Prices,	\$4.62	\$6.25	\$10.50	\$15.00	\$22.00	\$33.00

We always send pipe taps with right-hand threads, unless order calls for left-hand. Left-hand threads same price.

LITTLE GIANT SPRING SCREW THREADING DIE.



This die is adjustable by means of the clamp collar shown in above cut. For uniform and well-finished threads, better results will be had if two dies are used—one for roughing, the other for finishing. Dies can be readily sharpened.

LIST OF SIZES, THREADS AND PRICES.

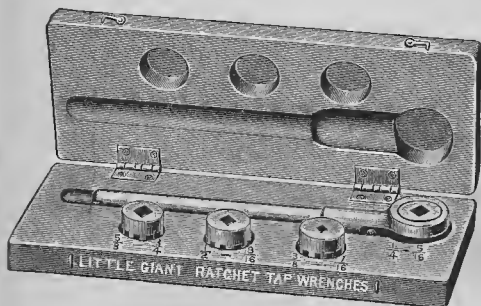
Diameter and Pitch of Screw.	Outside Diameter of Die in Inches	Length of Die	Price of Die	Price of Clamp Collar
1 40, 3 32, 1 20	$\frac{1}{2}$	1 $\frac{1}{4}$	\$1 50	\$0 50
1 20, 1 5 18, 3 16	$\frac{3}{4}$	1 $\frac{3}{4}$	1 75	60
1 16, 1 7 14, 2 13	1	2	2 00	70
1 11, 1 1 11, 3 10	1 $\frac{3}{16}$	2 $\frac{1}{4}$	2 00	80
1 16, 1 7 14, 2 13, } 9 12, 1 5 11, 3 10, } 1 13, 9 12, 5 11, }	1 $\frac{1}{4}$	2 $\frac{1}{2}$	2 00	80
1 10, 1 6 12, 8 11, }	1 $\frac{3}{8}$	2 $\frac{1}{2}$	2 40	1 00
1 11, 3 10, 7 9, 1 8	1 $\frac{5}{8}$	2 $\frac{1}{2}$	2 75	1 20
1 10, 7 9, 1 8, }	2	3	3 50	1 50
1 17, 1 1 7, }	2 $\frac{1}{2}$	3 $\frac{1}{2}$	5 00	2 50
1 18, 1 1 7, 1 1 7, }	3 $\frac{1}{4}$	4	8 00	5 00
1 16, 1 1 6, }				
1 15, 1 1 5, 2 4 $\frac{1}{2}$, }				
2 1 4 $\frac{1}{2}$				

Other diameters and pitches furnished at prices which will be furnished on application.

When ordering, give full details or send sketch.

LITTLE GIANT RATCHET TAP WRENCHES.

RATCHET WRENCHES FOR USE WITH TAPS.



We show above something new in the way of tap wrenches ; a wrench which will permit operator to get close up to any angle or corner, besides using in regular work. These are sold either in sets as shown above, or with handle with socket to fit such sizes as may be desired.

They are not made to hold above $\frac{3}{4}$ inch.

PRICE LIST.

Set as shown above, in case Price, \$1.80

This set holds Taps $\frac{1}{4}$ to $\frac{3}{4}$, inclusive.

Handle without Socket Price, .45

Sockets, each " .30

Handle with Single Socket " .75

When ordering handle with one or more sockets be sure and give size you desire to hold.

LITTLE GIANT TAPS AND TAP WRENCHES.

For the convenient use of machinists, we are now prepared to furnish complete sets of MACHINISTS' HAND TAPS in assortments as listed below. Each set contains

TAPER, PLUG AND BOTTOMING TAPS; ALSO ADJUSTABLE TAP WRENCH.

put up in case as shown, making a convenient place for each tool. We put these sets up V form of thread, EXACT SIZES, unless otherwise ordered. U. S. Standard or WHITWORTH forms of thread, *exact, or rough iron sizes*, furnished at same prices.



Assortment No. 5.

Contains Tap Wrench 10½ inches long, one each Taper, Plug and Bottoming Taps, $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, (15 taps).

Price, complete in case \$8.50

Assortment No. 6.

As shown above, contains Tap Wrench 15 inches long, one each Taper, Plug and Bottoming Taps, $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, (21 taps).

Price, complete in case \$13.50

Assortment No. 7.

Contains Tap Wrench 20 inches long, one each Taper, Plug and Bottoming Taps, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^9$, 1^8 , (21 taps).

Price, complete in case \$20.00

For other forms and pitches, see page 39.

LITTLE GIANT TAP WRENCHES.

ADJUSTABLE.

An adjustable tap and reamer wrench, at a reasonable price, is what we here illustrate.

JAWS MADE OF THE BEST TOOL STEEL.

Because these wrenches are cheap in price, do not think they are cheap in quality. We fully warrant them equal to any made. They are light, strong and durable. Workmanship of the highest order.

PRICES.

Size No. 0. Length, 7 inches, for taps $\frac{1}{16}$ to $\frac{1}{4}$ inch. . \$1.50.

Size No. 5. Length, 10½ inches, for taps $\frac{3}{16}$ to $\frac{1}{2}$ inch. . \$2.00.

Size No. 6. Length, 15 inches, for taps $\frac{1}{4}$ to $\frac{3}{4}$ inch . . \$2.50.

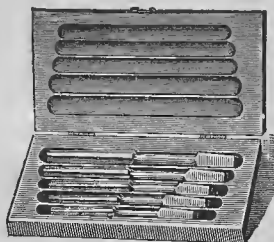
Size No. 7. Length, 20 inches, for taps $\frac{3}{8}$ to 1 inch . . \$3.50.

Size No. 8. Length, 42 inches, for taps $\frac{3}{4}$ to 1½ inches . \$7.00.

LITTLE GIANT REAMERS.

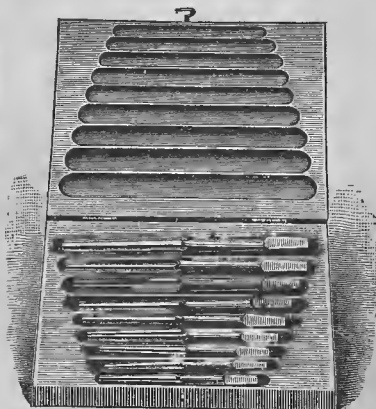
FOR BIT BRACE USE.

For reaming out and making true, smooth holes in wood or iron. Each reamer tapers $\frac{1}{8}$ of an inch, and follows from the smallest to the largest. These will be found very useful tools.



PRICE	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$
Per doz.	\$2.40	3.00	3.60	4.20	4.80	6.00	7.20	8.40	9.60
Each	\$0.20	.25	.30	.35	.40	.50	.60	.70	.80

Set of five, $\frac{1}{4}$ to $\frac{1}{2}$ inclusive, in case as above .. \$1.70
 Set of five, $\frac{1}{4}$ to $\frac{1}{2}$ inclusive, without case .. 1.50
 Set of nine, $\frac{1}{4}$ to $\frac{3}{4}$ inclusive, in case as below..... 4.40
 Set of nine, $\frac{1}{4}$ to $\frac{3}{4}$ inclusive, without case..... 4.10



They are carefully made, and when properly used will do a surprising amount of work.

LITTLE GIANT TAPER REAMERS.

WITH STRAIGHT SHANKS.



Sizes,	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{11}{16}$	$\frac{3}{4}$
Prices, \$	0.45	.50	.55	.60	.70	.80	.90	1.05	1.20

Sizes,	$\frac{13}{16}$	$\frac{7}{8}$	$\frac{15}{16}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$
Prices, \$	1.40	1.60	1.80	2.00	2.25	2.60	3.00	3.50

Wood Cases, holding $\frac{1}{4}$ to $\frac{1}{2}$ inch, inclusive (5 sizes).

Price \$0.20

Wood Cases, holding $\frac{1}{4}$ to $\frac{3}{4}$ inch, inclusive (9 sizes).

Price \$0.40

TAPER REAMERS.

With Shanks $\frac{1}{2}$ and $\frac{41}{64}$ inch Diameter.



Sizes,	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$1\frac{1}{16}$
Prices, \$	0.45	.50	.55	.60	.70	.80	.90	1.05

Sizes,	$\frac{3}{4}$	$1\frac{3}{16}$	$\frac{7}{8}$	$1\frac{5}{16}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$
Prices, \$	1.20	1.40	1.60	1.80	2.00	2.25	2.60

Wood Cases, holding $\frac{1}{4}$ to $\frac{1}{2}$ inch, inclusive (5 sizes).

Price \$0.20

Wood Cases, holding $\frac{1}{4}$ to $\frac{3}{4}$ inch, inclusive (9 sizes).

Price \$0.40

LITTLE GIANT CENTER DRILL CHUCKS.



These chucks have $\frac{3}{8}$ -inch diameter shanks. We furnish them for holding any size of drill $\frac{1}{8}$ of an inch and under. A holder is required for each size.

Price \$0.50 each.

LITTLE GIANT COUNTERSINKS.



*For use in Drill-
ing Machines.*

*For use in
Bit Brace.*



We keep in stock Screw, Bolt, Sleigh Shoe and Tire Bolt Tapers.

When ordering, state what taper is wanted.

These countersinks are easily sharpened and very durable, being made from the very best material.

PRICE LIST.

Countersinks	$\frac{5}{8}$	diam. with	$\frac{1}{2}$ or $\frac{41}{64}$	diam. shanks, each	..	\$0.50
"	$\frac{3}{4}$	"	"	"	"	.. .75
"	$\frac{7}{8}$	"	"	"	"	.. 1.00
"	1	"	"	"	"	.. 1.25
"	$\frac{5}{8}$	"	"	Shanks for Bit Brace,	"	.. .50

When ordering, state carefully just what is wanted.

Unless stated otherwise, countersinks for use in drilling machines *will be sent with $\frac{1}{2}$ -inch diameter shanks.*

LITTLE GIANT CENTER REAMER.



A tool highly appreciated by all machinists. Accurately made of best tool steel.

PRICES.

No. of Size	Size Shank	Size Cut	Each	Per Dozen
1	$\frac{3}{16}$	$\frac{1}{4}$	\$0.30	\$3.50
2	$\frac{1}{4}$	$\frac{3}{8}$	.40	4.50
3	$\frac{5}{16}$	$\frac{1}{2}$	.50	5.75
4	$\frac{3}{8}$	$\frac{3}{4}$	.50	5.75
5	$\frac{1}{2}$	$\frac{1}{2}$	.60	6.75

When ordering, give either the number of size or size of shank and cut.

LITTLE GIANT BIT BRACE BOLT POINTER.

FOR ROUNDING OVER ENDS OF ROUND
IRON BARS.

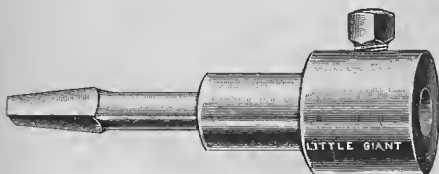


A convenient tool; will round over ends of bars
 $\frac{1}{2}$ inch diameter.

Price \$0.75

LITTLE GIANT CHUCKS OR HOLDERS.

FOR BIT BRACE USE.



To take drills, drill holders, and other tools
having round shanks, $\frac{1}{2}$ inch or $\frac{41}{64}$ inch in
diameter.

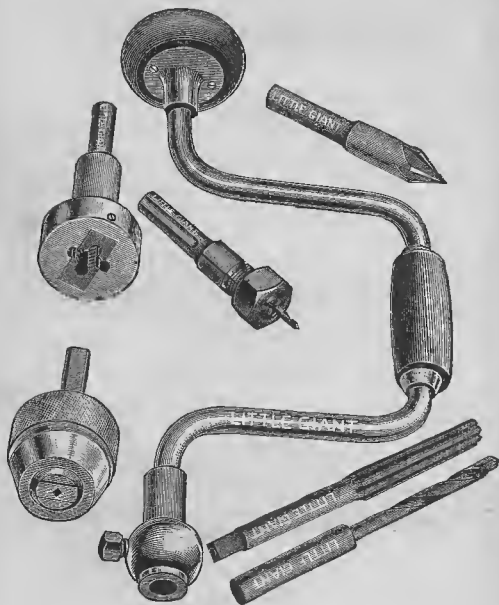
We can supply these holders with $\frac{1}{2}$ inch and
 $\frac{3}{8}$ inch round shanks, instead of brace shanks.

Price \$0.75

LITTLE GIANT BIT BRACE.

FOR HOLDING TOOLS WITH $\frac{1}{2}$ -INCH SHANKS.

For holding Drills, Reamers, Countersinks, Drill Chucks, Tap Chucks, Bit Brace Dies and Collets, and a hundred other tools with $\frac{1}{2}$ -inch shanks, this will be found a most useful brace.



$\frac{1}{2}$ inch.

In the above cut we have endeavored to show our new brace, with several tools made for its use of which a full description and prices will be found on other pages of this catalogue.

Price of Brace, each	\$ 1.25
“ “ “ per dozen	15.00

LITTLE GIANT NUT WRENCHES.

FOR BIT BRACE USE.

For Square or Hexagon Nuts.

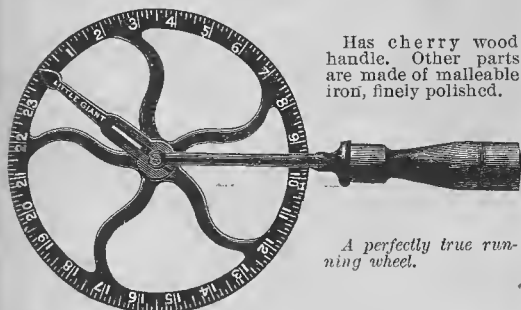


For putting on and taking off nuts in carriage work. For tapping nuts, etc., these wrenches have become almost indispensable, and every carriage shop should have them.

Set of Wrenches for 5 nuts, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$ and $\frac{1}{2}$ inch.

Price \$0.50

LITTLE GIANT GRADUATED TIRE WHEEL.



Has cherry wood handle. Other parts are made of malleable iron, finely polished.

A perfectly true running wheel.

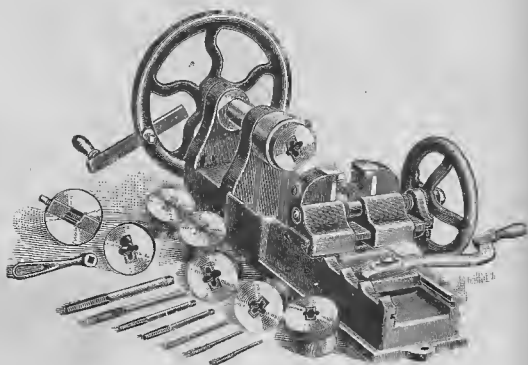
A durable and convenient tool for measuring lengths of tires accurately. The pointer is held in place by friction, so that it can be set instantly, and will not get loose.

It is light, accurately made, and strong. The circumference of wheel is exactly two feet, graduated by one-eighth of an inch.

Price, Graduated \$1.50
 " Plain 1.25

LITTLE GIANT HAND BOLT CUTTERS AND NUT TAPPERS.

No. 6.



Assortment No. 6.

Above machine complete, with TAP CHUCK,
TAPS, DIES and COLLETS.

Cutting, $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$.

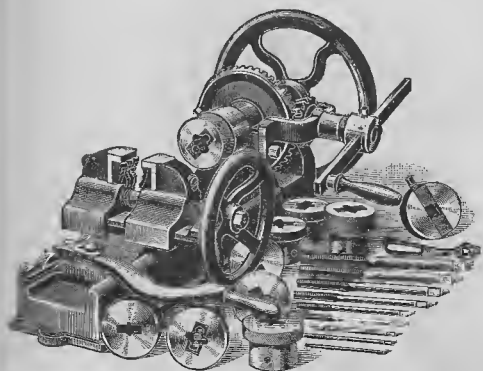
Price \$50.00.

Weight, complete, 150 pounds.

It is a complete machine for the general repair
shop.

LITTLE GIANT HAND BOLT CUTTERS AND NUT TAPPERS.

No. 7.



Assortment No. 7.

Above machine complete, with TAP CHUCK,
TAPS, DIES and COLLETS.

Cutting, $\frac{1}{4}$ 20, $\frac{5}{16}$ 18, $\frac{3}{8}$ 16, $\frac{7}{16}$ 14, $\frac{1}{2}$ 12, $\frac{5}{8}$ 11, $\frac{3}{4}$ 10, $\frac{7}{8}$ 9, 18.

Price \$70.00.

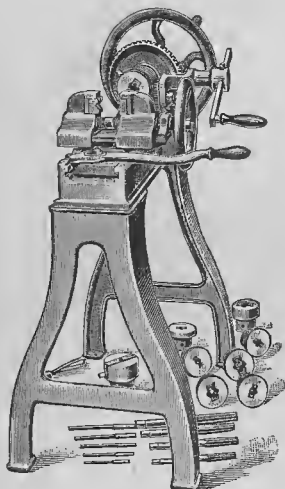
Weight, complete, 200 pounds.

Has improved clutch on spindle for running die
after thread is cut, making quick return.

It is a compact machine and adapted for car-
riage makers and repair shops.

LITTLE GIANT BOLT CUTTERS AND NUT TAPPERS.

Nos. 6 and 7, Mounted on Legs.



Assortment No. 6.

With Tap Chuck, Taps, Dies and Collets.

Cutting $\frac{1}{4}$ ²⁰, $\frac{5}{16}$ ¹⁸, $\frac{3}{8}$ ¹⁶, $\frac{7}{16}$ ¹⁴, $\frac{1}{2}$ ¹², $\frac{5}{8}$ ¹¹, $\frac{3}{4}$ ¹⁰.

Price \$57.00

Weight of above machine, 185 lbs.

Assortment No. 7.

With Tap Chuck, Taps, Dies and Collets.

Cutting $\frac{1}{4}$ ²⁰, $\frac{5}{16}$ ¹⁸, $\frac{3}{8}$ ¹⁶, $\frac{7}{16}$ ¹⁴, $\frac{1}{2}$ ¹², $\frac{5}{8}$ ¹¹, $\frac{3}{4}$ ¹⁰, $\frac{7}{8}$ ⁹, 1 ⁸.

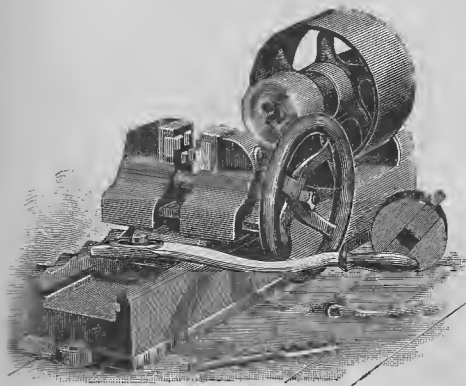
Price \$77.00

Weight of above machine, 235 lbs.

When ordering, be sure and state *mounted on legs*.

LITTLE GIANT POWER BOLT CUTTERS AND NUT TAPPERS.

No. 0.



The above cut shows our new Power Bolt Cutter and Nut Tapper, arranged for bench. This makes a convenient machine, and in many places takes the place of a higher-priced machine. It cuts to 1 inch, inclusive.

Pulley on spindle 4 inches wide, 8 inches diameter.

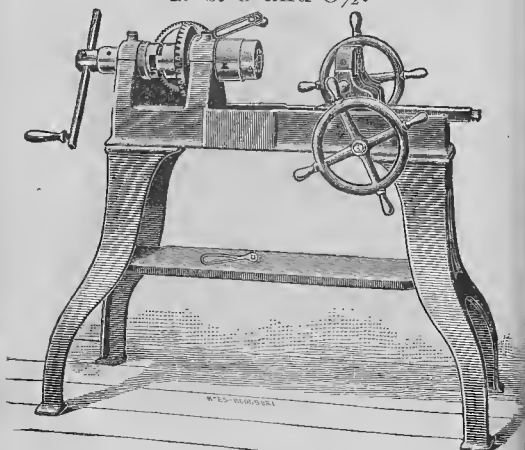
PRICE LIST.

Machine without Taps, Dies and	
Collets, or Tap Chuck	Price, \$25.00
Main Countershaft (see page 77)	" 15.00
Friction Clutch Countershaft	" 25.00
Tap Chuck	" 8.00
Tap, extra	" 7.00

For price of Taps, Dies and Collets see page 76.

LITTLE GIANT HAND BOLT CUTTERS AND NUT TAPPERS.

Nos. 8 and 8½.



This machine has three changes of speed, multiplying the power two and seven times, and equalizing it once.

Assortment No. 8.

Cutting $\frac{1}{4}$ "²⁰, $\frac{5}{16}$ "¹⁸, $\frac{3}{8}$ "¹⁶, $\frac{7}{16}$ "¹⁴, $\frac{1}{2}$ "¹², $\frac{5}{8}$ "¹¹, $\frac{3}{4}$ "¹⁰,
 $\frac{7}{8}$ "⁹, 1"⁸ Price, \$90.00

Assortment No. 8½.

Cutting $\frac{1}{4}$ "²⁰, $\frac{5}{16}$ "¹⁸, $\frac{3}{8}$ "¹⁶, $\frac{7}{16}$ "¹⁴, $\frac{1}{2}$ "¹², $\frac{5}{8}$ "¹¹, $\frac{3}{4}$ "¹⁰, $\frac{7}{8}$ "⁹,
1"⁸, 1 $\frac{1}{8}$ "⁷, 1 $\frac{1}{4}$ "⁷ Price, \$108.00

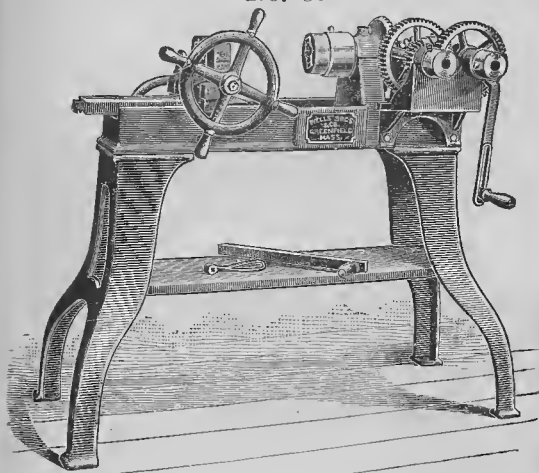
Weight of machine, 350 lbs.

This machine has our improved tail block jaws, for holding iron; also clutch on spindle, for throwing out gear.

Balance wheel furnished on end of spindle for \$5.00 extra.

LITTLE GIANT HAND BOLT CUTTERS AND NUT TAPPERS.

No. 9.



This machine has four changes of speed, multiplying the power 14, 7 and 2 times, and equalizes it once.

Crooked as well as straight, long as well as short bolts threaded equally as well. This machine has clutch on spindle for throwing out gear, also our improved jaws for holding iron in the tail block, both of which are important features. Has hollow spindle and is capable of a great variety of work.

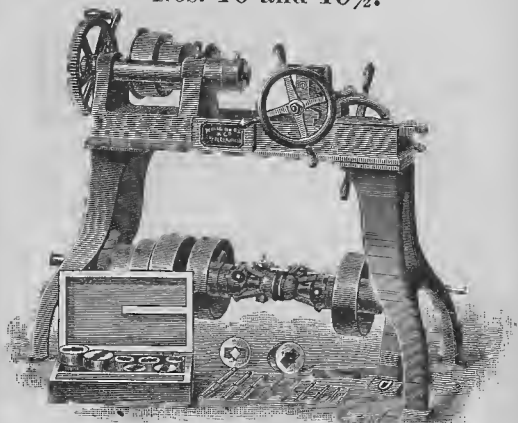
Assortment No. 9.

Price, including Tap Chuck, Taps, Dies and Collets, cutting $\frac{3}{8}$ "¹⁶, $\frac{7}{16}$ "¹⁴, $\frac{1}{2}$ "¹², $\frac{5}{8}$ "¹¹, $\frac{3}{4}$ "¹⁰, $\frac{7}{8}$ "⁹, 1"⁸, 1 $\frac{1}{8}$ "⁷, 1 $\frac{1}{4}$ "⁶, 1 $\frac{3}{8}$ "⁵, 1 $\frac{1}{2}$ "⁴ Price, \$140.00

We furnish balance wheel on end of spindle for \$5.00 extra. Weight of machine, 400 lbs. If other sizes are desired, add price of tap, die and collet. See price list page 76.

LITTLE GIANT POWER BOLT CUTTERS AND NUT TAPPERS.

Nos. 10 and 10½.



Machine complete, with Plain Countershaft, Tap Chuck, Taps, Adjustable Dies and Collets.

Assortment No. 10.

Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^9$, 1^8 Price, \$115.00

If with Friction Clutch, \$10.00 extra.

Assortment No. 10½.

Cutting $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^9$, 1^8 , $1\frac{1}{8}^7$, $1\frac{1}{4}^7$ Price, \$133.90

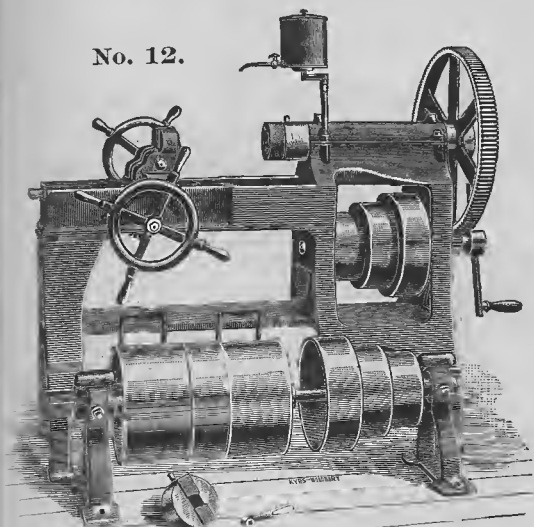
If with Friction Clutch, \$10.00 extra.

Weight of machine, 600 lbs. Speed of countershaft, 250 revolutions per minute. Size of driving pulleys on countershaft, $3\frac{1}{2} \times 10$ inches.

We furnish all our machines with V threads *and over size*, unless otherwise ordered. But, if desired, Franklin Institute or Whitworth threads are furnished at same prices.

LITTLE GIANT POWER BOLT CUTTERS AND NUT TAPPERS.

No. 12.



Machine complete, with Plain Countershaft, Tap Chuck, Taps, Dies and Collets.

Cutting $\frac{3}{8}$ "¹⁶, $\frac{7}{16}$ "¹⁴, $\frac{1}{2}$ "¹², $\frac{5}{8}$ "¹¹, $\frac{3}{4}$ "¹⁰, $\frac{7}{8}$ "⁹, 1"⁸, 1 $\frac{1}{8}$ "⁷,
1 $\frac{1}{4}$ "⁷, 1 $\frac{3}{8}$ "⁶, 1 $\frac{1}{2}$ "⁶. Price, \$165.00

If with Friction Clutch, \$10.00 extra.

Weight of machine complete, 850 lbs.

Speed of countershaft, 200 revolutions per minute.

Pipe, dies and collets extra. See list, page 76.

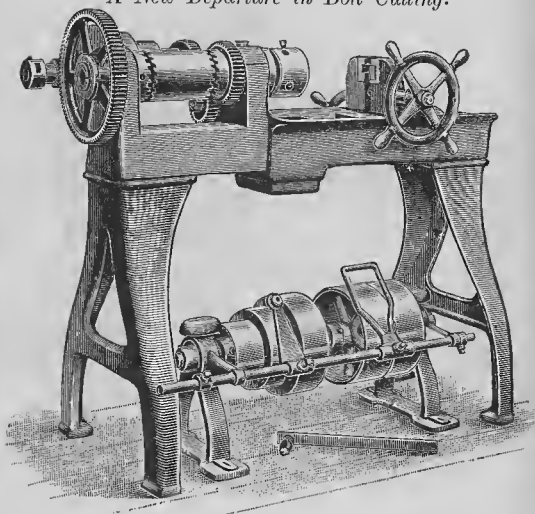
Three-step cone pulley, with steps 3 $\frac{1}{2}$ x 8, 10, 12 inches. Large gear, 22 inches diameter. Small gear, 3 inches, giving great power.

Size of driving pulleys on countershaft, 3 $\frac{1}{2}$ x 12.

LITTLE GIANT BOLT CUTTERS AND NUT TAPPERS.

No. 14.

A New Departure in Bolt Cutting.



PRICE LIST.

Assortment No. A 14.

Machine No. 14 with Countershaft, Tap Chuck, Taps, Dies and Collets. Cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 inch. Price, \$155.00

When countershaft is not wanted deduct \$15 00.

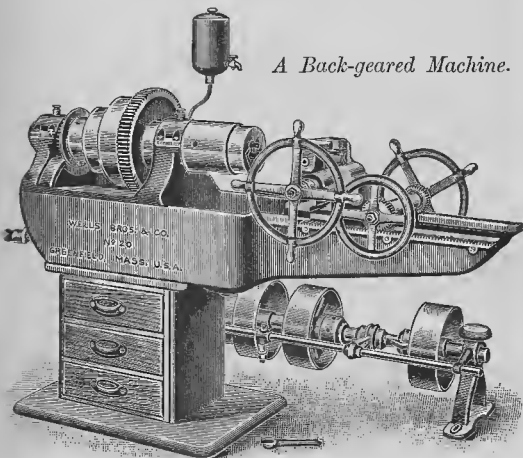
The machine is arranged with automatic quick return. By pushing *up* on tail block dies are run on to the bolt. By pushing *back* on tail block dies are run off automatically at an increased speed. This in many kinds of work makes this machine a rival of an open die machine.

But *one belt* is needed on countershaft.

Speed of countershaft, 250 revolutions per minute.

LITTLE GIANT HAND BOLT CUTTERS AND NUT TAPPERS.

No. 20.



A Back-geared Machine.

PRICE LIST AND ASSORTMENTS.

Assortment No. A 20.

Machine No. 20 with Friction Clutch Countershaft, Tap Chuck, Taps, Dies and Collets. Cutting $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ inches. \$290.00

Assortment No. B 20.

Machine No. 20 with Friction Clutch Countershaft, Tap Chuck, Taps, Dies and Collets. Cutting $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2 inches \$328.20

If plain countershaft is wanted deduct \$10.00 from above prices.

For prices of taps, dies and collets, see page 76.

Speed of countershaft 200 revolutions per minute, which gives a range from 10 to 400 revolutions of spindle per minute. Machine has six speeds.

LITTLE GIANT BOLT CUTTERS AND NUT TAPPERS.

We give below price list of our full line of Bolt Cutters and Nut Tappers, *without Taps, Dies, Collets, Tap Chuck and Countershaft—just the plain machine.*

If other parts are wanted, prices will be found in the several list prices in catalogue.

No. 6. Machine as stated above \$ 25.00

No. 7. Machine as stated above 30.00

No. 8. Machine as stated above 50.00

No. 9. Machine as stated above 65.00

No. 10. Machine as stated above 65.00

No. 12. Machine as stated above 80.00

No. 14. Machine as stated above 105.00

No. 20. Machine as stated above 205.00

Where parties do not care for machine with full assortment of taps, dies and collets as listed, they will take the above list prices and add to them list price of the parts wanted. See page 76.

LITTLE GIANT BOLT CUTTERS AND NUT TAPPERS, WITH SOLID DIES.

We furnish our full line of Hand and Power Bolt Cutters, and Nut Tappers, with Taps, Solid Dies and Collets of the following assortments, at the following prices:

No. 6. Hand Bolt Cutter complete, with Tap Chuck, Taps, Dies and Collets.

Cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ \$50.00

No. 7. Hand Bolt Cutter complete, with Tap Chuck, Taps, Dies and Collets.

Cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 inch. . . \$65.00

No. 8. Hand Bolt Cutter complete, with Tap Chuck, Taps, Dies and Collets.

Cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 inch. . . \$85.00

No. 9. Hand Bolt Cutter complete, with Tap Chuck, Taps, Dies and Collets.

Cutting $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$. \$125.00

No. 10. Power Bolt Cutter complete, with Tap Chuck, Taps, Dies and Collets, and Plain Countershaft.

Cutting $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1 inch . . \$110.00

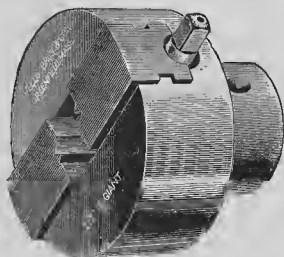
No. 12. Power Bolt Cutter complete, with Tap Chuck, Taps, Dies and Collets, and Plain Countershaft.

Cutting $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, 1, $1\frac{1}{8}$, $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$. \$150.00

Unless otherwise ordered, we always send "V" form of thread and the following number of threads for each size: $\frac{1}{4}^{20}$, $\frac{5}{16}^{18}$, $\frac{3}{8}^{16}$, $\frac{7}{16}^{14}$, $\frac{1}{2}^{12}$, $\frac{5}{8}^{11}$, $\frac{3}{4}^{10}$, $\frac{7}{8}^9$, 1^8 , $1\frac{1}{8}^7$, $1\frac{1}{4}^7$, $1\frac{3}{8}^6$, $1\frac{1}{2}^6$, ROUGH IRON SIZES. Other threads and exact sizes furnished if desired.

LITTLE GIANT TAP CHUCKS.

FOR USE IN OUR MACHINES.

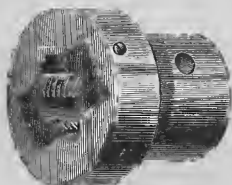


Tap chucks for use in our hand and power bolt cutters.

Nos. 6, 7, 8 and 10 (shanks $2\frac{3}{4}$ diameter) . .	\$ 8 0
Nos. 9, $10\frac{1}{2}$, 12 and 14 (shanks $2\frac{3}{4}$ diameter) . .	10 0
No. 20 (shanks $4\frac{1}{2}$ diameter)	15 0

When ordering these chucks, be sure and give number of machine chuck is to be used in.

We furnish all our bolt cutters with taps and dies "V" form of thread, rough iron sizes, unless otherwise ordered. U. S. S. and Whitworth form of thread same list price.



Diameter of shank to
Collet $2\frac{3}{4}$ inches.

For specials, see pages
37, 38, 39.

When machines are ordered with U. S. S. or Whitworth forms of thread we shall send taps and dies exact sizes.

LITTLE GIANT BOLT CUTTERS AND NUT TAPPERS.

PRICES OF TAPS, DIES AND COLLETS, ALSO
SOLID PIPE DIES.

Diameter, Inches	Number of Threads to Inch, V Form	Machine Taps, Each	Adjustable Dies, Each, without Collets	Adjustable Die, Tap and Collet, per Set	Solid Pipe Dies, without Collets
$\frac{1}{4}$	18, 20	\$0 60	\$1 00	\$2 10	\$2 00
$\frac{5}{16}$	16, 18	70	1 00	2 20	
$\frac{3}{8}$	14, 16	80	1 25	2 55	2 00
$\frac{7}{16}$	14	90	1 25	2 65	
$\frac{1}{2}$	12, 13	1 00	1 50	3 00	2 00
$\frac{9}{16}$	11, 12	1 15	1 50	3 15	
$\frac{5}{8}$	10, 11, 12	1 30	1 75	3 55	
$\frac{11}{16}$	11	1 45	1 75	3 70	
$\frac{3}{4}$	10	1 60	2 00	4 10	2 00
$\frac{13}{16}$	10	1 80	2 00	5 30	
$\frac{7}{8}$	9	2 10	2 75	6 35	
$\frac{15}{16}$	9	2 40	2 75	6 65	
1	8	2 80	2 75	7 05	2 00
$1\frac{1}{8}$	7, 8	3 20	4 00	8 70	
$1\frac{1}{4}$	7	3 70	4 00	9 20	3 50
$1\frac{3}{8}$	6	4 20	5 00	10 70	
$1\frac{1}{2}$	6	4 70	5 00	11 20	3 50
$1\frac{5}{8}$	5	5 20	8 50	15 30	
$1\frac{3}{4}$	5	6 00	10 00	18 50	3 50
$1\frac{7}{8}$	$4\frac{1}{2}$	6 80	10 00	19 30	
2	$4\frac{1}{2}$	7 70	12 00	22 20	3 50

Collets, $\frac{1}{4}$ to $\frac{3}{4}$ (for Adjustable Dies) incl., each, \$0 50

Collets, $\frac{7}{8}$ to $1\frac{1}{2}$ (for Adjustable Dies) incl., " 1 50

Collets, for Solid Dies " 1 50

Collets, for Pipe Dies " 1 50

Collet Caps, $\frac{1}{4}$ to $\frac{3}{4}$ " 30

Collet Caps, $\frac{7}{8}$ to $1\frac{1}{2}$ " 1 00

Collet Caps, $1\frac{3}{8}$ to 2 " 2 00

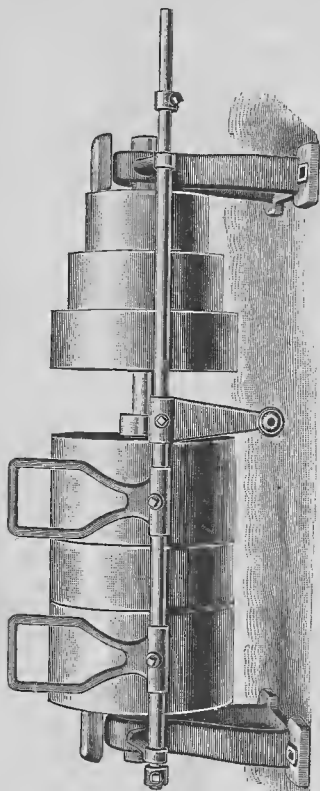
Collet Guides, $\frac{1}{4}$ to $\frac{3}{4}$ " 20

Collet Guides, $\frac{7}{8}$ to $1\frac{1}{2}$ " 50

Collet Guides, $1\frac{3}{8}$ to 2 " 50

LITTLE GIANT PLAIN COUNTERSHAFTS.

PLAIN COUNTERSHAFTS.



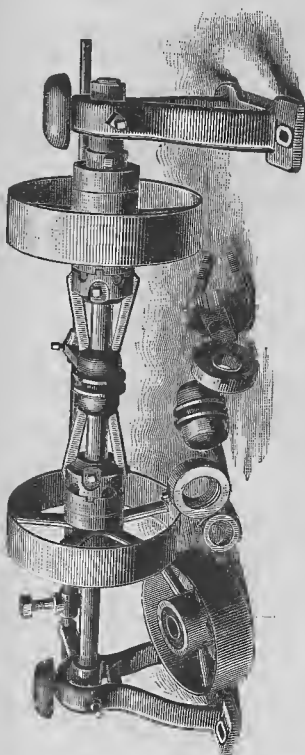
These countershafts are made from our latest patterns. Have self-oiling boxes. When ordering, state diameter and face, and say whether cone pulley is wanted or not.

PRICES OF COUNTERSHAFTS.

Diameter of Pulleys	Width of Face	Price without Cone Pulley	Price Complete
10 inches.	3½ inches	\$11 00	\$15 00
12 “	3½ “	11 00	15 00

LITTLE GIANT FRICTION CLUTCH COUNTERSHAFTS.

FRICTION CLUTCH COUNTERSHAFT.



These pulleys are noiseless, easy to work, of ample power, are easily adjusted, and will not slip or stick. They are so simple that an explanation of the way they operate is unnecessary.

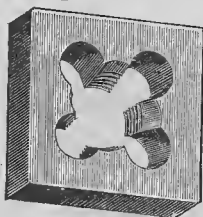
PRICES FOR COUNTERSHAFT, WITHOUT CONE PULLEY.

Diameter of Pulleys	Width of Face	Price
12 inches	3 inches	\$20 00
12 "	4 "	20 00

LITTLE GIANT SOLID BOLT DIES.

FOR MACHINE USE.

Solid Square Bolt Dies.



PRICE LIST.

Cutting Size	Standard No. of V Threads to Inch	Outside Dimensions		Price
		Size of Sq.	Thickness	
$\frac{1}{4}$	20	$2\frac{1}{2}$ in.	$\frac{1}{2}$ in.	\$1 80
$\frac{5}{16}$	18	$2\frac{1}{2}$ "	$\frac{1}{2}$ "	1 80
$\frac{3}{8}$	16	$2\frac{1}{2}$ "	$\frac{1}{2}$ "	1 80
$\frac{7}{16}$	14	$2\frac{1}{2}$ "	$\frac{1}{2}$ "	1 80
$\frac{1}{2}$	12	$2\frac{1}{2}$ "	$\frac{3}{4}$ "	1 80
$\frac{9}{16}$	12	$2\frac{1}{2}$ "	$\frac{3}{4}$ "	1 90
$\frac{5}{8}$	11	$2\frac{1}{2}$ "	$\frac{3}{4}$ "	2 00
$\frac{11}{16}$	11	$2\frac{1}{2}$ "	$\frac{3}{4}$ "	2 15
$\frac{3}{4}$	10	$2\frac{1}{2}$ "	$\frac{3}{4}$ "	2 25
$\frac{7}{8}$	10	$2\frac{1}{2}$ "	$\frac{3}{4}$ "	2 30
$\frac{15}{16}$	9	$2\frac{1}{2}$ "	$\frac{3}{4}$ "	2 40
1	9	$2\frac{1}{2}$ "	$\frac{3}{4}$ "	2 55
$1\frac{1}{8}$	8	$2\frac{1}{2}$ "	1 "	2 70
$1\frac{1}{4}$	7	$2\frac{1}{2}$ "	1 "	3 00
$1\frac{3}{8}$	7	$2\frac{1}{2}$ "	1 "	3 30
$1\frac{1}{2}$	6	$2\frac{1}{2}$ "	1 "	3 60
$1\frac{5}{8}$	6	3 "	1 "	3 90
$1\frac{3}{4}$	5	3 "	1 "	4 20
$1\frac{7}{8}$	5	3 "	$1\frac{1}{4}$ "	5 40
2	$4\frac{1}{2}$	$3\frac{1}{2}$ "	$1\frac{1}{2}$ "	6 50
	$4\frac{1}{2}$	$3\frac{1}{2}$ "	2 "	7 50

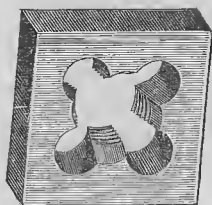
All dies of above list will be sent exact size, V thread, unless otherwise ordered.

Rough iron sizes furnished at same prices. Prices of other forms and pitches furnished on application.

LITTLE GIANT SOLID BOLT DIES.

FOR MACHINE USE.

Solid Bevel-edge Bolt Dies.

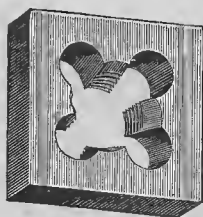


PRICE LIST.

Diameter	No Threads to Inch	Size of Square	Price Each
$\frac{9}{32}$	18, 20	$2\frac{1}{4}$ x $\frac{1}{2}$ inch thick	\$1 80
$\frac{11}{32}$	16, 18	$2\frac{1}{4}$ x $\frac{1}{2}$ " "	1 80
$\frac{13}{32}$	14, 16	$2\frac{1}{4}$ x $\frac{1}{2}$ " "	1 80
$\frac{15}{32}$	14	$2\frac{1}{4}$ x $\frac{1}{2}$ " "	1 80
$\frac{17}{32}$	12, 13	$2\frac{1}{4}$ x $\frac{3}{4}$ " "	1 80
$\frac{19}{32}$	12	$2\frac{1}{4}$ x $\frac{3}{4}$ " "	2 00
$\frac{21}{32}$	10, 11	$2\frac{1}{4}$ x $\frac{3}{4}$ " "	2 00
$\frac{23}{32}$	10	$2\frac{1}{4}$ x $\frac{3}{4}$ " "	2 20
$\frac{25}{32}$	9	$2\frac{1}{4}$ x $\frac{3}{4}$ " "	2 40
$\frac{27}{32}$	8	$2\frac{1}{4}$ x 1 " "	2 70
$1\frac{1}{32}$	7	$2\frac{1}{4}$ x 1 " "	3 00
$1\frac{3}{32}$	7	$2\frac{1}{4}$ x 1 " "	3 30
$1\frac{5}{32}$	6	3 x 1 " "	3 60
$1\frac{7}{32}$	6	3 x 1 " "	3 90
$1\frac{9}{32}$	5, 5 $\frac{1}{2}$	3 x 1 " "	4 20
$1\frac{11}{32}$	5	3 x $1\frac{1}{4}$ " "	5 40
$1\frac{13}{32}$	4 $\frac{1}{2}$, 5	$3\frac{1}{2}$ x $1\frac{1}{2}$ " "	6 50
$1\frac{15}{32}$	4 $\frac{1}{2}$	$3\frac{3}{4}$ x 2 " "	7 50

Special sizes and threads made to order at short notice, and subject to special prices.

LITTLE GIANT SOLID PIPE DIES.



PRICE LIST.

Size	Dimensions of Dies	Price	Price of Collets Fitted to Bolt Cutters
$\frac{1}{8}$ to $\frac{1}{2}$	2 x 2 x $\frac{1}{2}$	\$1 50	. . . . .
$\frac{1}{4}$ to 1	$2\frac{1}{2}$ x $2\frac{1}{2}$ x $\frac{3}{4}$	2 00	\$1 50
$\frac{3}{4}$ to $1\frac{1}{4}$	3 x 3 x $\frac{3}{4}$	2 50	1 50
1 to $1\frac{1}{2}$	3 x 3 x $\frac{3}{4}$	2 50	1 50
$1\frac{1}{4}$ to 2	4 x 4 x $\frac{7}{8}$	3 50	1 50
$2\frac{1}{2}$ to 3	5 x 5 x $1\frac{1}{4}$	9 00	. . . . .

Left-hand dies furnished at same list prices.

Right-hand dies always sent unless otherwise ordered.

These dies will fit any make of stock, holding dies of above dimensions.

THE NEW LITTLE GIANT DRILL.

WITH STRAIGHT OR SWINGING TABLE.

The illustrations given on the succeeding pages give a fair idea of our New Little Giant Blacksmiths' Drilling Machines, as arranged for hand or power.

We desire to say this, that although we have put the price of these machines *low*, nothing has been neglected to make them the *most perfect, compact and thoroughly well-made drill* in the market.

GENERAL DIMENSIONS AND POINTS.

WEIGHT OF THESE MACHINES, 150 lbs.

Drills from $\frac{1}{8}$ to $1\frac{1}{4}$ -inch hole.

Drills to center of 14-inch circle.

Has three changes of feed. Feed equally continuous on all changes.

Spindle self-lubricating by filling reservoir at top of same.

Table is removable for drilling tire, and instantly adjustable to height.

The frame is of iron, cast in one piece, giving machine strength and stiffness.

Spindle is steel, with steel set screw *hardened and tempered*.

Table is perfectly square with spindle.

The feed has a run of 4 inches.

The table has an adjustment of 16 inches.

On power machines, pulleys will not interfere with use of hand crank.

Spindles are made to receive $\frac{1}{2}$ -inch or $\frac{41}{64}$ shanked drills, as ordered. Unless ordered otherwise, $\frac{1}{2}$ -inch hole will be sent.

All parts are interchangeable.

For convenience in ordering, we have numbered these machines: Nos. 2, 4, 6.

[For drills, reamers, countersinks, and other tools fitted for these machines, see other pages of catalogue.]

LITTLE GIANT DRILLING MACHINE.

STRAIGHT TABLE.

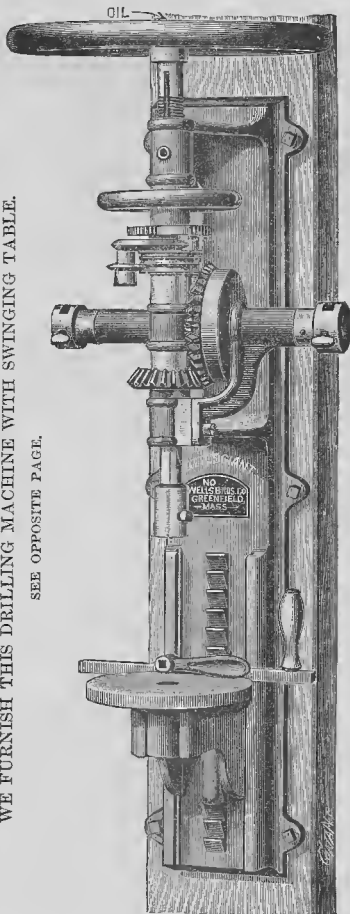
Use Left-hand Crank for Large Drills. The power is multiplied one and one-half times.
 Use the Right-hand Crank for Small Drills. The speed is multiplied one and one-half times.

No. 2.

DRILLS TO 1¼ INCHES.

WE FURNISH THIS DRILLING MACHINE WITH SWINGING TABLE.

SEE OPPOSITE PAGE.



Change of Feed Instantaneous.

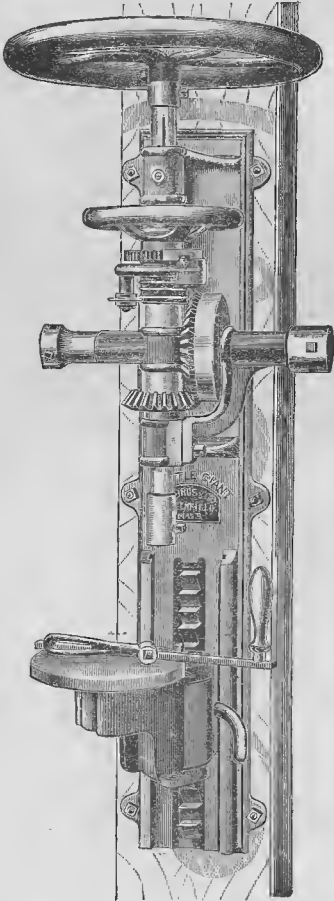
Table of this Machine is Perfectly Square with Spindle.

All Parts Interchangeable.
 Has Iron Bed.

No. 2 Price, \$18.00.

LITTLE GIANT DRILLING MACHINE.
SWINGING TABLE.

No. 4.

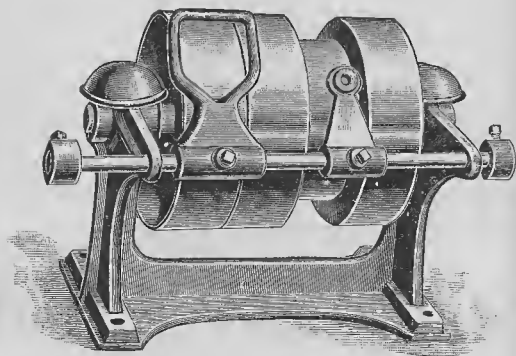


Arranged for hand, with Swinging Table.

No. 4 Price, \$20.00

LITTLE GIANT DRILLING MACHINES.

COUNTERSHAFT.



When desired, we furnish with our upright drilling machines countershafts with cone pulley as shown above.

Price, extra. \$10.00

These countershafts should run about 200 revolutions per minute.

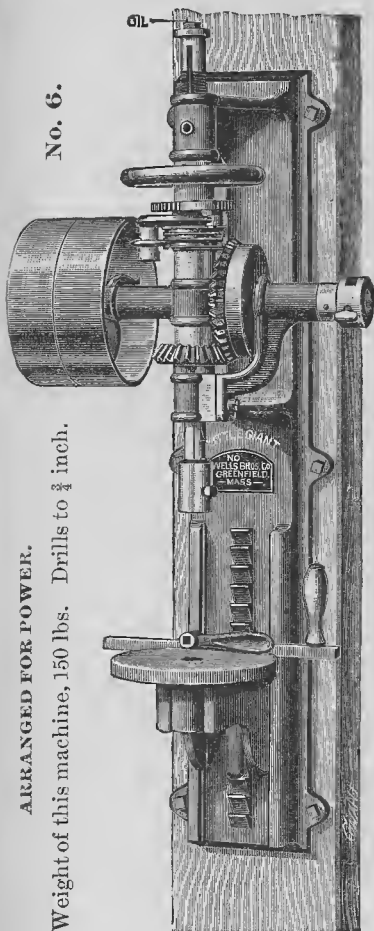
Pulleys are 8 inches diameter, 2 inches face.

LITTLE GIANT DRILLING MACHINES.

ARRANGED FOR POWER.

Weight of this machine, 150 lbs. Drills to $\frac{3}{4}$ inch.

No. 6.

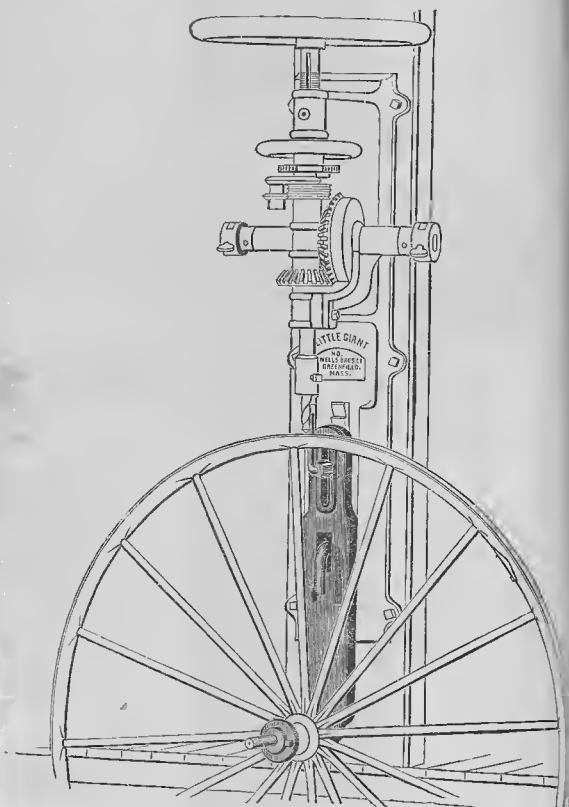


This machine is adapted for use either by Hand or Power.

Price, with Straight Table . . \$21.00. With Swinging Table . . \$23.00.

We send Swinging Table, unless otherwise ordered. We furnish machines with Cone Pulley, if desired, at same price.

LITTLE GIANT WHEEL HOLDING ATTACHMENT.

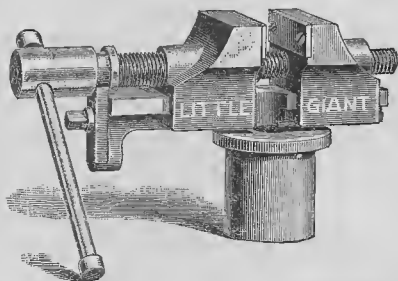


As used upon our Nos. 2, 4, 6 Drills.

Price \$4.00

LITTLE GIANT DRILLING MACHINE VISE.

FOR HOLDING ALL SHAPES OF IRON.



A new and useful vise, for holding all shapes and sizes of articles for drilling in our drilling machines. Has steel jaws; hole through shank to take any length. Arranged so as to be in center with spindle, or, if desired, can be thrown to one side. Jaws are operated by right and left-hand screw.

Price, complete \$8.00

LITTLE GIANT BLACKSMITHS' DRILL.

No. 5.

Price \$10.00

Cut on opposite page shows our latest production in Blacksmiths' Upright Drilling Machines.

Although we have made the price **low**, nothing has been left undone in quality or workmanship to make it the **most perfect, compact** and thoroughly made drill on the market for the price.

GENERAL DIMENSIONS AND POINTS.

Drills to 1-inch diameter hole.

Drills to center of 15-inch circle.

Table is removable for drilling tire, or can be swung to side. Adjustable to height.

Bed is of iron, cast in one piece, giving machine

STRENGTH AND STIFFNESS.

Feed has a run of 4 inches.

Table has an adjustment of 11 inches.

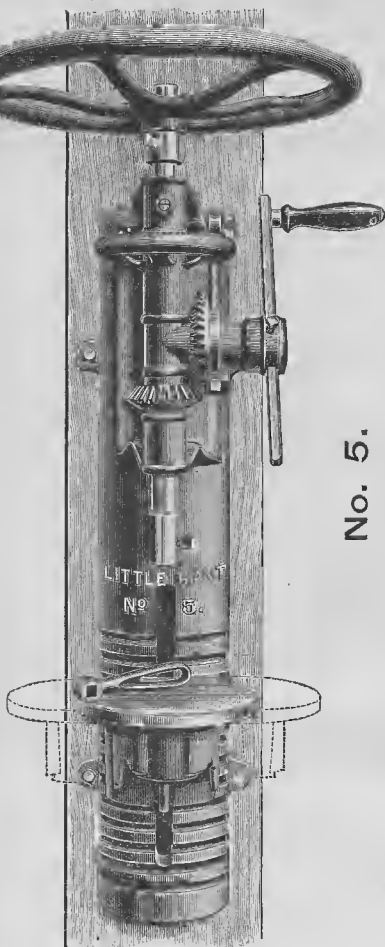
Spindles are made to receive $\frac{1}{2}$ or $\frac{1\frac{1}{4}}{1\frac{1}{2}}$ shanked drills.

Unless otherwise ordered, $\frac{1}{2}$ -inch hole will be sent.

When ordering mention No. 5.

LITTLE GIANT BLACKSMITH DRILL.

AN IRON BED MACHINE, STIFF AND STRONG.



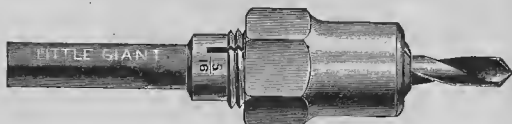
No. 5.

Make mention of this number when ordering.

Price \$10.00

LITTLE GIANT DRILL HOLDERS.

FOR HOLDING STRAIGHT SHANK DRILLS.



With Shanks $\frac{1}{2}$ or $\frac{3}{8}$ Diameter.

PRICES AND SIZES.

For holding drills $\frac{1}{8}$, $\frac{5}{32}$, $\frac{3}{16}$, $\frac{7}{32}$, $\frac{1}{4}$, $\frac{9}{32}$, $\frac{5}{16}$, $\frac{11}{32}$, $\frac{3}{8}$,
 $\frac{13}{32}$, $\frac{7}{16}$, $\frac{15}{32}$. Each \$0.70

We send $\frac{1}{2}$ shanks if not otherwise ordered.

This will be found not only USEFUL, but a MONEY-SAVING tool.

Useful, because it is always ready with drill set for use.

Will save you money, because you can buy straight shank drills for less than half the price of half-inch shank drills.

Will save you money, because you can take so short a bite on drill that, should it break, you would yet have a part of drill saved.

Will save you money, because you can use up what broken drills you may have on hand.

It requires a holder for each size drill.

DRILL HOLDERS (FOR STRAIGHT SHANK DRILLS) WITH TAPER SHANKS.



For holding drills $\frac{1}{8}$, $\frac{5}{32}$, $\frac{3}{16}$, $\frac{7}{32}$, $\frac{1}{4}$, $\frac{9}{32}$, $\frac{5}{16}$, $\frac{11}{32}$, $\frac{3}{8}$,
 $\frac{13}{32}$, $\frac{7}{16}$, $\frac{15}{32}$. Each \$0.85

Unless otherwise ordered, these will be sent with No. 2 Morse Taper. Other standard tapers at same price.

For prices of drills see page 92.

LITTLE GIANT TWIST DRILLS.

WITH STRAIGHT SHANKS.

Used in Our Drill Holders.

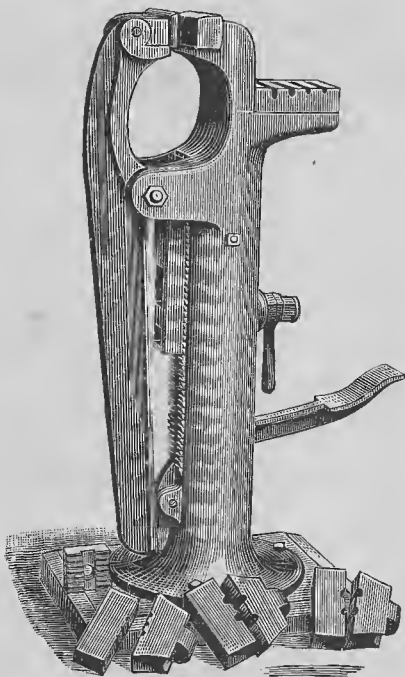
JOBBER'S' AND MACHINISTS' SETS.

Diameter	Length	Price per Dozen	Price Each
$\frac{1}{16}$	$2\frac{1}{2}$	\$1 00	\$0 09
$\frac{5}{64}$	$2\frac{5}{8}$	1 10	10
$\frac{3}{32}$	$2\frac{3}{4}$	1 20	11
$\frac{7}{64}$	$2\frac{7}{8}$	1 30	12
$\frac{1}{8}$	3	1 45	13
$\frac{9}{64}$	$3\frac{1}{8}$	1 60	15
$\frac{5}{32}$	$3\frac{1}{4}$	1 80	16
$\frac{11}{64}$	$3\frac{3}{8}$	2 00	18
$\frac{3}{16}$	$3\frac{1}{2}$	2 20	20
$\frac{13}{64}$	$3\frac{5}{8}$	2 40	21
$\frac{7}{32}$	$3\frac{3}{4}$	2 65	23
$\frac{15}{64}$	$3\frac{7}{8}$	2 90	26
$\frac{1}{4}$	4	3 15	28
$\frac{17}{64}$	$4\frac{1}{8}$	3 40	30
$\frac{9}{32}$	$4\frac{1}{4}$	3 65	32
$\frac{19}{64}$	$4\frac{3}{8}$	3 90	35
$\frac{5}{16}$	$4\frac{1}{2}$	4 20	37
$\frac{21}{64}$	$4\frac{5}{8}$	4 50	40
$\frac{11}{32}$	$4\frac{3}{4}$	4 80	42
$\frac{23}{64}$	$4\frac{7}{8}$	5 10	45
$\frac{3}{8}$	5	5 40	48
$\frac{25}{64}$	$5\frac{1}{8}$	5 70	50
$\frac{13}{32}$	$5\frac{1}{4}$	6 00	53
$\frac{27}{64}$	$5\frac{3}{8}$	6 40	55
$\frac{7}{16}$	$5\frac{1}{2}$	6 80	59
$\frac{29}{64}$	$5\frac{5}{8}$	7 20	63
$\frac{15}{32}$	$5\frac{3}{4}$	7 50	65
$\frac{31}{64}$	$5\frac{7}{8}$	7 75	67
$\frac{1}{2}$	6	8 00	70

FOOT VISE AND BOLT HEADER.

No. 1.

Simple, Strong, Solid and Durable.



For forming, sharpening, and welding calks on horse and ox shoes, for making bolt heads, and takes the place of an ordinary vise for bending and shaping hot iron, thus combining two machines in one.

Weight, 165 pounds.

FOOT VISE AND BOLT HEADER.

Shoe calks can be made sharp or square, for winter or summer use, and the dies are so shaped that the calks are better formed than they can be in the ordinary way, and from two to three times as many.

The die on which the calks are formed is of best tool steel, and is shaped so that it forms the calk the right shape; sharp or square calks can be formed by simply turning the steel die around.

By a peculiar arrangement of the dies they *adjust themselves to the shoe*, no matter whether it is thick or thin, tapering or straight, and do not hold the shoe by *corner of the dies*, as would be the case with any other arrangement.

The anvil attachment has grooves or dies for welding different sizes of sharp calks.

There are dies for making bolt heads on the following sizes of iron, from $1\frac{1}{2}$ inches to 21 inches long: $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ inch. The dies for forming shoe calks and other work

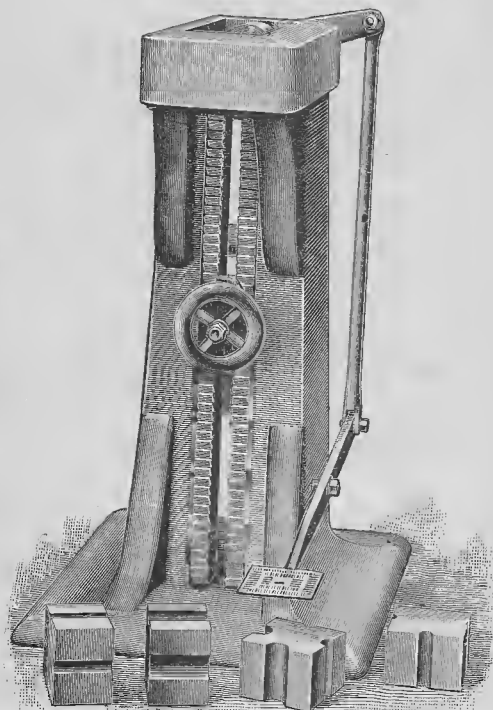
Can be Changed Quickly.

PRICES.

No. 1.	Complete with Shoeing and Bolt Heading Dies	\$20.00
No. 2.	Without Shoeing Dies	17.00
No. 3.	Without Bolt Heading Dies	17.00

BOLT HEADER.

No. 8.



Price, complete \$50.00

This Bolt Header is intended for heavy work, and is furnished with *steel dies* for heading bolts from $\frac{1}{2}$ to $1\frac{1}{2}$ inches, inclusive. Takes bolts to 26 inches long. A very strong machine.

LITTLE GIANT RATCHET NUT WRENCHES.



No. 1.



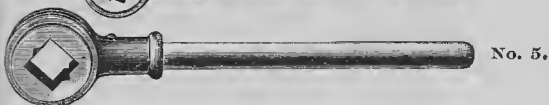
No. 2.



No. 3.



No. 4.



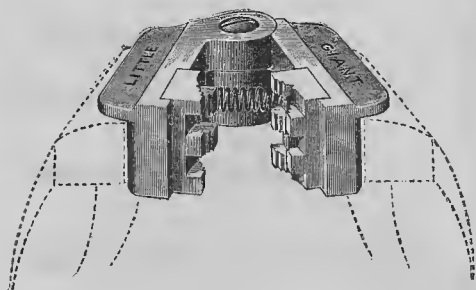
No. 5.

LIST OF LENGTHS, SIZES AND PRICES.

Number of Wrench	Size of Nut	Whole Length	Price of Handle	Price of Socket	Price Complete
No. 1	$\frac{3}{16}$ & $\frac{1}{4}$ in.	7 in.	\$0 45	\$0 30	\$0 75
" 2	$\frac{5}{16}$ " $\frac{3}{8}$ "	8 "	60	40	1 00
" 3	$\frac{7}{16}$ " $\frac{1}{2}$ "	10 "	75	50	1 25
" 4	$\frac{5}{8}$ " $\frac{3}{4}$ "	13 "	1 40	60	2 00
" 5	$\frac{7}{8}$ " 1 "	16 "	2 25	75	3 00

For the use of blacksmiths and carriage makers, for the removal of nuts, the above tool will be found a most convenient one. It is complete in itself. Is strong and thoroughly made. When ordering, give number of the wrench wanted.

LITTLE GIANT VISE BOLT GRIP.



Did you ever try to hold a bolt in a common vise jaw while threading? If you have, you are well aware what an unsatisfactory job it is. Now here is something that will make it easy. The accompanying cut gives a clear idea as to its use. It holds without a possible chance of slipping.

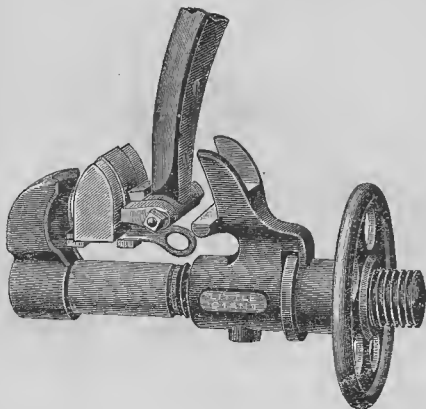
They are always ready, and will fit any size or kind of vise. Jaws made interchangeable, of best cast steel, hardened and tempered. A complete tool in itself.

Price, complete \$1.75

“ Steel Jaws, a pair75

Will hold from $\frac{1}{4}$ in. to $1\frac{1}{4}$ in.

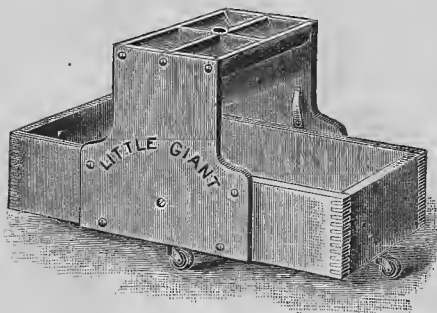
LITTLE GIANT THILL COUPLER.



This useful tool will at once be appreciated by all parties who have rubbers to insert. We claim an advantage over all lever tools for this work from the fact that with the screw the set will stop and hold at any point. No carriage-maker or liveryman can afford to be without this labor and time-saving tool.

Price \$1.50

LITTLE GIANT FARRIERS' TOOL BOX.



A cheap, strong, durable box for Horseshoers' Tools.

Made of thoroughly well-seasoned stock, lock cornered, mortised bottom and side pieces, finely finished and thoroughly made in every respect. This case, properly used, will last a horseshoer very much longer than those commonly in use.

Price, each \$2.00

PACKED FOR THE TRADE IN CRATES OF FOUR.

LITTLE GIANT HORSESHOERS' BUTTERIS.

This useful tool will be highly appreciated by all horseshoers. Perfect in design, strong, durable and cheap.

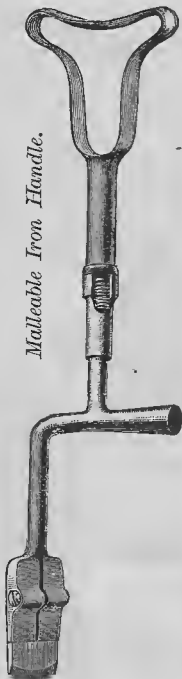
Ebony Wood Handle.



Handles adjustable to length. Knives replaceable.

Malleable Iron Brace, highly polished.

Malleable Iron Handle.

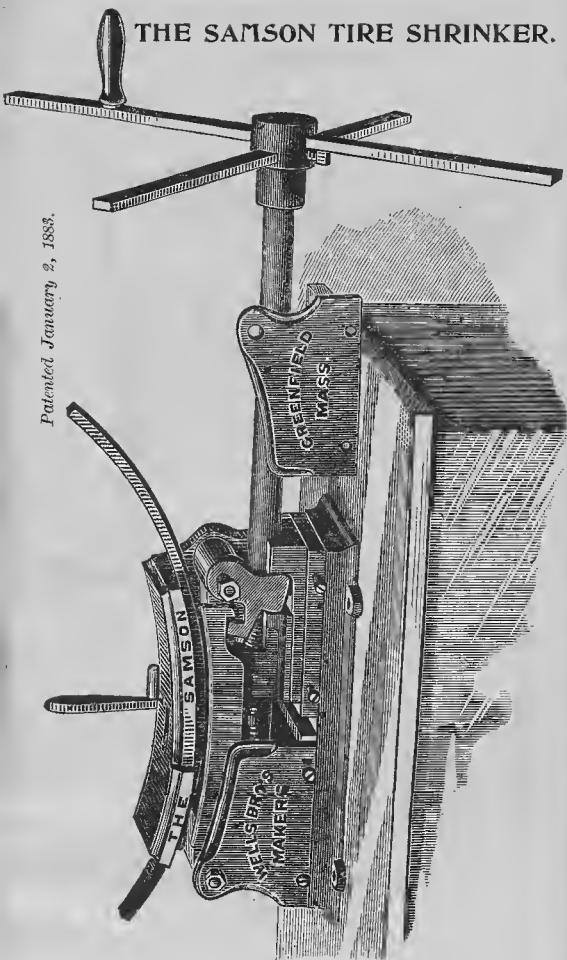


Price of Butteris, with Ebony Handle . . .	\$1.50
“ “ “ “ Crutch “ . . .	1.50
Extra Knives . . . . .	.25

Making it the cheapest butteris for repairs in the market.

THE SAMSON TIRE SHRINKER.

Patented January 2, 1883.



THE SAMSON TIRE SHRINKER.

With this machine tires can be shortened without cutting and *without a hammer*. It is so easily worked that a boy can work it, and so quickly that a tire can be upset as soon as it could be cut; and it can be shortened the *exact distance required the first time*.

The power is supplied by a screw, with which we get at least four times the power that can be got in any other way. The shaft on which the screw is cut is long enough to let the handle revolve without hitting the tire, thus giving plenty of speed.

The tire is held so that it *cannot double up*. There are no cams to be hammered or put into place by hand before or after the tire is upset; it is sure to hold the tire until it is upset, and sure to loosen it afterwards. All that is necessary is to heat the tire, place it in the machine, and turn the handle until it is upset enough. All slipping and sticking are avoided.

This is the only machine in use in which this can be done.

It is made very strong and cannot break, and as there are only two small pieces of steel to wear, these can be easily sharpened.

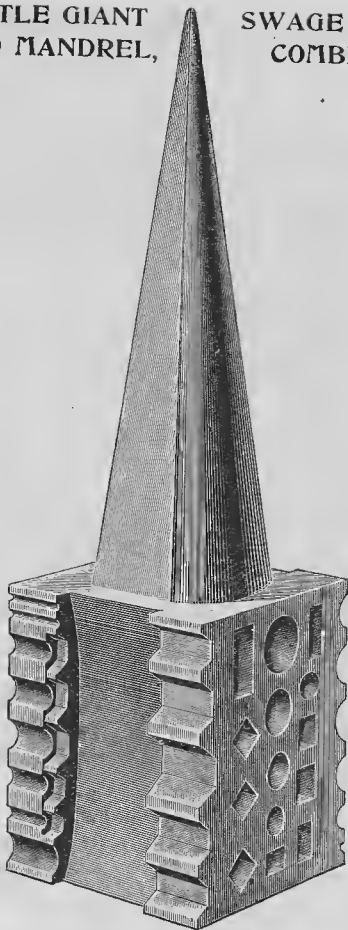
The principle of this machine is entirely new, and we warrant it to be and to do all we claim.

No. 2 will upset tires from $\frac{1}{8}$ to $\frac{3}{4}$ inch thick, 4 inches wide. Weight about 220 lbs.

Price. \$25.00

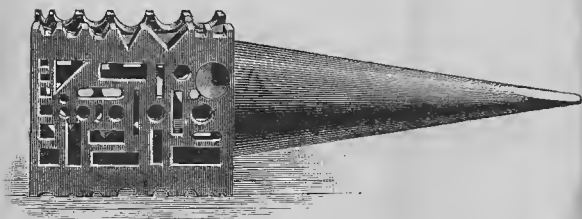
LITTLE GIANT
AND MANDREL,

SWAGE BLOCK
COMBINED.



Price, complete. \$25.00

LITTLE GIANT SWAGE BLOCK AND MANDREL, COMBINED.



The accompanying cuts show our Combined Swage Block and Mandrel.

Upwards of 70 forms and shapes are contained in this swage block.

The base is 15 x 15 x 18, mandrel 35 inches high, making total height 53 inches.

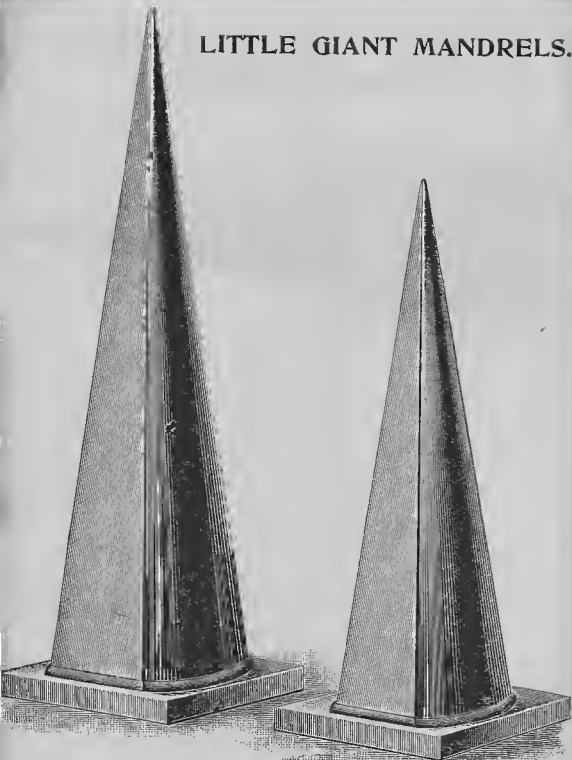
Mandrel is flattened on one side to permit use of tongs to grasp work.

Mandrel is used to turn-swage block so as to bring the form which is desired to be used on top. It is easily handled and does away with the necessity of a base.

For blacksmiths, carriage makers and machine shops this will be found a desirable and convenient addition to their labor-saving tools.

For prices see opposite page.

LITTLE GIANT MANDRELS.



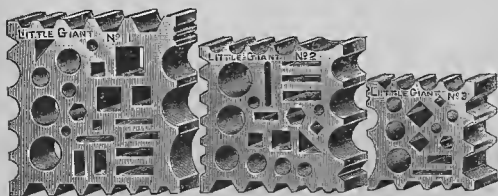
DESCRIPTION AND PRICES.

Number of Mandrel	Size of Base	Height	Price
1	10 inches	36 inches	\$ 6.00
2	10 "	46 "	7.75
3	12 "	48 "	11 00
4	16 "	62 "	16 00

We make these mandrels in sizes shown above. They are flattened on one side to permit work to be grasped firmly with tongs. They have square bases, which keep them from being so easily tipped over. When ordering, mention the number of mandrel wanted.

LITTLE GIANT SWAGE BLOCKS.

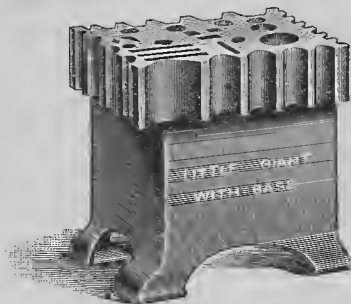
FOR MACHINE AND BLACKSMITHS' SHOPS.



PRICE LIST AND SIZES.

	Not planed.	Planed both sides.
Swage Block No. 1, 18x18x4	\$11 00	\$13 00
" " " 2, 15x15x4	7 00	8.50
" " " 3, 11x11x4	4 00	5 00

Unless otherwise ordered, swage blocks will be sent *not planed*.



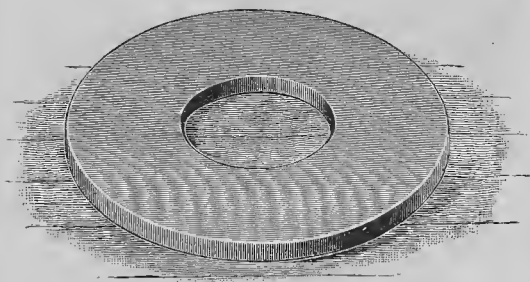
We also furnish swage blocks with base as represented above. Swage block and base are cast in one piece. When edges are used base can be tipped so that edge needed will come on upper side.

PRICE LIST AND SIZES.

	Not planed.	Planed.
Swage Block No. 11, 18x18x4x16 high . . .	\$15.50	\$17.50
" " " 12, 15x15x4x16 " . . .	12.00	13.50
" " " 13, 11x11x4x16 " . . .	7.25	8.25

Unless otherwise ordered, swage blocks will be sent *not planed*.

LITTLE GIANT IRON PLATE FOR TIRE SETTING.



Above cut shows our Iron Plate for Tire Setting. It is cast in one piece. It is 5 feet in diameter and is supported by ribs. Has 30-inch opening.

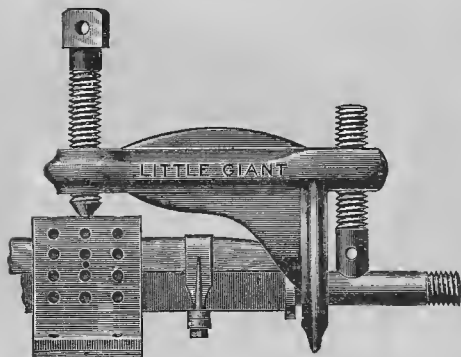
No. 1 is made dishing . . . Price, \$20.00

We also make these with flat surfaces, otherwise the same as above.

No. 2, not dished Price, \$20.00

When ordering, state plainly the number of plate wanted.

THE LITTLE GIANT AXLE SETTER AND STRAIGHTENER.



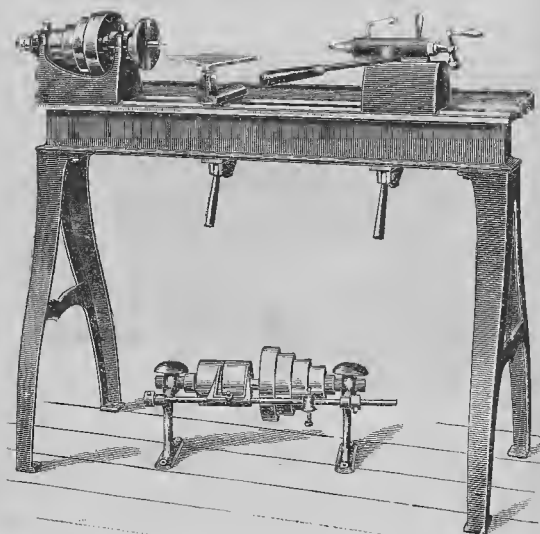
A labor and time-saving machine, that does its work complete. Axles bent can be accurately set without removing, making a perfect job. With the use of this machine it is not necessary to set axles on a new job until it is ready for the paint shop. All four axles can be straightened in less time than is usually required to remove one.

Simple, Strong and Practical.

PRICE.

No. 2.—For axles up to and including
1 $\frac{3}{4}$ inches **\$6.00**

LITTLE GIANT LATHE.

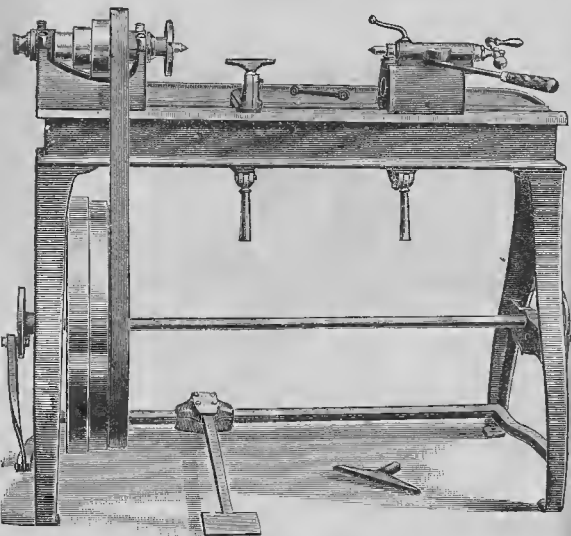


Length of Bed	4 feet.
Length between Centers	26 inches.
Swing	11 inches.
Weight	300 lbs.
Price, with Countershaft.	\$60 00.

Has hollow spindle; hole in spindle $\frac{7}{16}$ inch.
 Has both screw and lever feed for tail spindle. A
 thoroughly well made tool.

LITTLE GIANT SPEED LATHE.

FOOT POWER.



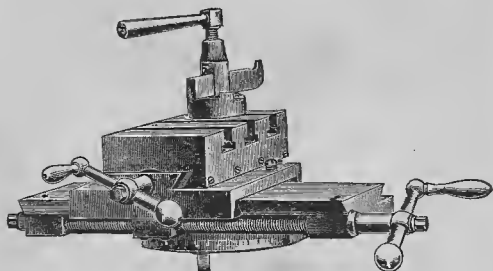
Full description of this lathe is given on opposite page. It has all the features of the other, differing only in the fact that it is for foot power.

Price \$70.00

The screw and lever feed for tail spindle is an important feature in this lathe, as it is desirable to have both to adapt its use to all classes of work.

LITTLE GIANT SPEED LATHE

SLIDE RESTS.



Little Giant Slide Rest.

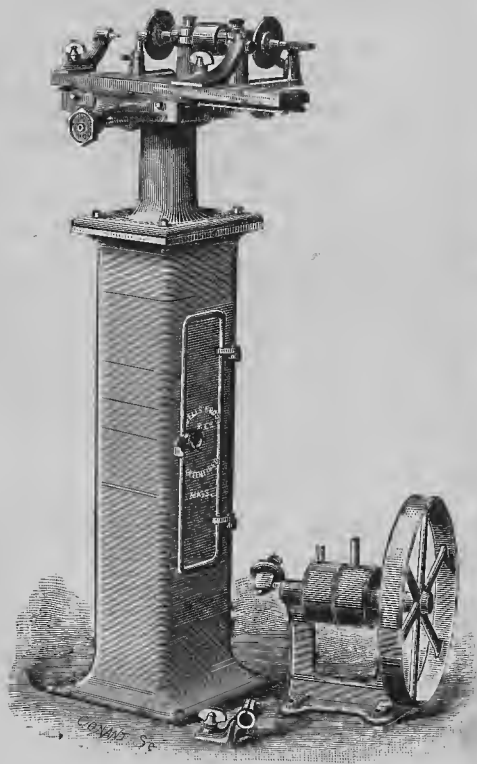
These slide rests are made from new patterns, are strong and well proportioned in all their parts. All parts are carefully fitted. Screws are made of steel.

Has feed lengthwise of 8 inches.

“ “ crosswise “ 4 “

Price \$32.00

CUTTER GRINDING MACHINE.



For grinding cutters, taps, taper reamers, lathe tools, and various other uses. See description and prices on page 113.

CUTTER GRINDING MACHINE.

We desire to call special attention to this simple machine for grinding milling cutters, taps, taper reamers, lathe tools, etc., etc. Cutters to 6 inches in diameter, both spiral or straight, reamers 14 inches and less in length, can be ground in this machine. The bearings are adjustable for wear, and the ways are gibbed, so that the machine can always be kept in good working order. The arbor is arranged for two wheels, one on each end. The base has a number of shelves, making a convenient place to keep tools.

The machine is of thorough workmanship, and substantial in all its parts.

GENERAL DIMENSIONS.

Tight and loose pulleys on countershaft, 2-inch face, 4-inch diameter.

Speed of countershaft, 500 revolutions per minute.

Weight of machine, complete, 200 pounds.

Price of machine, complete . . \$62.00

Price of machine, without standard
or base 50.00

Overhead work accompanies the machine.

Emery wheels are not furnished with machine.

LITTLE GIANT DRILL LIST.

Showing Different Sizes of Drills when a Full Thread is to be Tapped in a Hole. Also the Proper Holes in Nuts.

Diam. of Tap	No. Threads to Inch	Drill for V Thread	Drill for U. S. S. Thread
$\frac{1}{4}$	16, 18, 20	$\frac{5}{32}$, $\frac{5}{32}$, $\frac{1}{16}$	$\frac{3}{16}$
$\frac{9}{32}$	16, 18, 20	$\frac{3}{16}$, $\frac{13}{64}$, $\frac{13}{64}$	
$\frac{5}{16}$	16, 18	$\frac{7}{32}$, $\frac{15}{64}$	
$\frac{11}{32}$	16, 18	$\frac{1}{4}$, $\frac{17}{64}$	$\frac{1}{4}$
$\frac{3}{8}$	14, 16, 18	$\frac{1}{4}$, $\frac{9}{32}$, $\frac{9}{32}$	$\frac{9}{32}$
$\frac{13}{32}$	14, 16, 18	$\frac{19}{64}$, $\frac{21}{64}$, $\frac{21}{64}$	
$\frac{7}{16}$	14, 16	$\frac{21}{64}$, $\frac{1}{32}$	$\frac{11}{32}$
$\frac{15}{32}$	14, 16	$\frac{23}{64}$, $\frac{3}{8}$	
$\frac{1}{2}$	12, 13, 14	$\frac{3}{8}$, $\frac{25}{64}$, $\frac{25}{64}$	$\frac{13}{32}$
$\frac{17}{32}$	12, 13, 14	$\frac{13}{32}$, $\frac{27}{64}$, $\frac{27}{64}$	
$\frac{9}{16}$	12, 14	$\frac{7}{16}$, $\frac{29}{64}$	$\frac{7}{16}$
$\frac{19}{32}$	12, 14	$\frac{15}{32}$, $\frac{31}{64}$	
$\frac{5}{8}$	10, 11, 12	$\frac{15}{32}$, $\frac{1}{2}$, $\frac{1}{2}$	$\frac{1}{2}$
$\frac{23}{32}$	10, 11, 12	$\frac{1}{2}$, $\frac{17}{32}$, $\frac{17}{32}$	
$\frac{11}{16}$	11, 12	$\frac{9}{16}$, $\frac{9}{16}$	
$\frac{23}{32}$	11, 12	$\frac{19}{32}$, $\frac{19}{32}$	
$\frac{3}{4}$	10, 11, 12	$\frac{19}{32}$, $\frac{5}{8}$, $\frac{5}{8}$	$\frac{5}{8}$
$\frac{25}{32}$	10, 11, 12	$\frac{5}{8}$, $\frac{21}{32}$, $\frac{21}{32}$	
$\frac{13}{16}$	10	$\frac{21}{32}$	
$\frac{27}{32}$	10	$\frac{11}{16}$	
$\frac{7}{8}$	9, 10	$\frac{45}{64}$, $\frac{23}{32}$	$\frac{23}{32}$
$\frac{29}{32}$	9, 10	$\frac{47}{64}$, $\frac{3}{4}$	
$\frac{15}{16}$	9	$\frac{49}{64}$	
$\frac{31}{32}$	9	$\frac{51}{64}$	
1	8	$\frac{13}{16}$	$\frac{27}{32}$
$\frac{11}{32}$	8	$\frac{53}{64}$	$\frac{27}{32}$
$\frac{11}{16}$	7, 8	$\frac{29}{32}$, $\frac{15}{16}$	$\frac{15}{16}$
$\frac{15}{32}$	7, 8	$\frac{15}{16}$, $\frac{31}{32}$	$\frac{15}{16}$
$\frac{11}{4}$	7	$\frac{11}{32}$	$\frac{11}{16}$
$\frac{9}{32}$	7	$\frac{11}{16}$	
$\frac{11}{8}$	6	$\frac{11}{8}$	$\frac{15}{32}$
$\frac{13}{32}$	6	$\frac{15}{32}$	
$\frac{11}{2}$	6	$\frac{15}{64}$	$\frac{19}{32}$
$\frac{17}{32}$	6	$\frac{9}{32}$	
$\frac{5}{8}$	5, $5\frac{1}{2}$	$\frac{9}{32}$, $\frac{15}{16}$	
$\frac{21}{32}$	5, $5\frac{1}{2}$	$\frac{15}{16}$, $\frac{11}{32}$	$\frac{13}{8}$
$\frac{34}{32}$	5	$\frac{13}{32}$	
$\frac{7}{8}$	5	$\frac{7}{8}$	$\frac{11}{2}$
$\frac{39}{32}$	$4\frac{1}{2}$, 5	$\frac{17}{32}$, $\frac{17}{32}$	$\frac{15}{8}$
2	$4\frac{1}{2}$	$\frac{19}{16}$, $\frac{19}{16}$	
		$\frac{21}{32}$	$\frac{13}{32}$

LITTLE GIANT TWIST DRILLS.

WITH $\frac{1}{2}$ -INCH SHANKS.



Diameter	Length	Price Each	Diameter	Length	Price Each
$\frac{1}{8}$	5 $\frac{1}{8}$ in.	\$0 45	$\frac{1}{8}$	9 $\frac{1}{4}$ in.	\$1 60
$\frac{3}{32}$	5 $\frac{3}{8}$ "	45	$\frac{3}{32}$	9 $\frac{3}{8}$ "	1 70
$\frac{1}{4}$	5 $\frac{1}{2}$ "	50	$\frac{1}{4}$	9 $\frac{1}{2}$ "	1 85
$\frac{5}{32}$	5 $\frac{7}{8}$ "	55	$\frac{5}{32}$	9 $\frac{3}{4}$ "	2 00
$\frac{3}{16}$	6 "	60	$\frac{3}{16}$	10 "	2 15
$\frac{7}{32}$	6 $\frac{1}{8}$ "	65	$\frac{7}{32}$	10 $\frac{1}{4}$ "	2 30
$\frac{1}{2}$	6 $\frac{1}{4}$ "	70	$\frac{1}{2}$	10 $\frac{3}{8}$ "	2 45
$\frac{9}{32}$	6 $\frac{3}{8}$ "	75	$\frac{9}{32}$	10 $\frac{1}{2}$ "	2 60
$\frac{5}{16}$	6 $\frac{1}{2}$ "	80	$\frac{5}{16}$	10 $\frac{3}{4}$ "	2 75
$\frac{11}{32}$	6 $\frac{3}{4}$ "	85	$\frac{11}{32}$	10 $\frac{1}{2}$ "	2 90
$\frac{3}{8}$	7 "	90	$\frac{3}{8}$	11 "	3 00
$\frac{13}{32}$	7 $\frac{1}{4}$ "	95	$\frac{13}{32}$	11 $\frac{1}{8}$ "	3 20
$\frac{7}{16}$	7 $\frac{1}{2}$ "	1 00	$\frac{7}{16}$	11 $\frac{1}{4}$ "	3 40
$\frac{15}{32}$	7 $\frac{3}{4}$ "	1 10	$\frac{15}{32}$	11 $\frac{3}{8}$ "	3 60
$\frac{1}{2}$	8 "	1 20	$\frac{1}{2}$	11 $\frac{1}{2}$ "	3 80
$\frac{17}{32}$	8 $\frac{1}{4}$ "	1 30	$\frac{17}{32}$	11 $\frac{3}{4}$ "	4 00
$\frac{9}{16}$	8 $\frac{1}{2}$ "	1 40	$\frac{9}{16}$	12 "	4 20
$\frac{19}{32}$	8 $\frac{3}{4}$ "	1 50	$\frac{19}{32}$	12 $\frac{1}{2}$ "	4 50
$\frac{5}{8}$	9 "		$\frac{5}{8}$		

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• • NOTICE • •

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In ordering taps or dies, say whether they should be **exact** or rough iron sizes, "V," U. S. S. or Whitworth forms of thread.

Read last two paragraphs on page 13, also read pages 37, 38 and 39. They contain valuable information in ordering goods.

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